

*International conference on*  
**REGIONAL DEVELOPMENT**


*economic change*

CA20N  
ED  
-1965  
R22



*Selected*  
**background papers  
for the Conference on  
Regional Development  
and Economic Change  
February 15, 16 and 17, 1965**

*Department*  
**DEPARTMENT OF ECONOMICS AND DEVELOPMENT**



Digitized by the Internet Archive  
in 2024 with funding from  
University of Toronto

<https://archive.org/details/39201416080264>

[Ont.] = [Conferences]

International conference on regional  
development and economic change

## REGIONAL DEVELOPMENT

---

Selected Background Papers

for the

Province of Ontario's

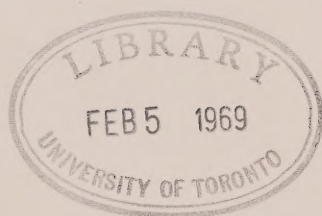
International Conference on Regional Development

and Economic Change

February 15, 16, 17,

Toronto, 1964<sup>1965</sup>

Papers for this preconference report  
were compiled and edited by Leonard O.  
Gertler, MTPIC, Special Consultant to  
the Department of Economics & Develop-  
ment of the Province of Ontario for  
the program and contents.





## PREFACE

The problems of regional development are increasingly challenging the minds of man.

The Province of Ontario has undertaken to hold the Conference on Regional Development and Economic Change in Toronto, February 15, 16, 17, 1965, at which its citizens will have an opportunity to hear international leaders in thought and action in the field of Regional Economic Development.

The publication of this preconference catalogue of Regional statements is undertaken with the hope that purposeful thought and discussion may be fully stimulated.

Stanley J. Randall,  
Minister,  
Department of Economics &  
Development.

February 1, 1965.



### APPRECIATION

The Ontario Department of Economics and Development wishes to express its appreciation and that of the editor of this publication for the gracious consents to republish important articles, already in print, under new cover for purposes of the International Conference on Regional Development and Economic Change.

Co-operation of all agencies and institutions contacted was immediate and whole-hearted.

It is our wish to express thanks to The Committee for Economic Development, 711 Fifth Ave., New York City; Community Planning Association of Canada; Town Planning Institute of Canada; Queens Printer, Ottawa; American Institute of Planners; The Executive of the British Columbia Natural Resources Conference; The Canadian Political Science Association; University of Chicago and University of Chicago Press; Queens University and Queen's Quarterly; University of Toronto and University of Toronto Press; University of Wisconsin and Land Economics Quarterly; Resources for the Future Inc.; and the Canadian Federation of Mayors and Municipalities.





# REGIONAL DEVELOPMENT

---

Selected Background Papers

for the

Province of Ontario's

International Conference on Regional Development

and Economic Change

February 15, 16, 17, Toronto, 1964



## CONTENTS

### INTRODUCTION

#### PART I - BASIC APPROACHES

"Approaches to Regional Development"

Harvey S. Perloff and Vera Dodd

From How a Region Grows, Committee for Economic Development, 1963

"Basic Problems of Regional Planning in Canada"

J. Wreford Watson

Community Planning Review, Volume IV, 1954

"Regional Planning"

Hans Blumenfeld

PLAN, Canada, Volume 1, No. 2, June, 1960

"Regional Planning and Development"

Leonard O. Gertler

Resources for Tomorrow Conference, Background Papers,  
Volume 1, 1961

#### PART II - "CENTRALIZATION OR DECENTRALIZATION OF ECONOMIC GROWTH?"

"The Nature of Regions: Relative Advantages and Disadvantages?"

Harvey S. Perloff and Vera Dodd

from How a Region Grows, Committee for Economic Development, 1963

"Industrial Decentralization"

Yves Dube, J. E. Howes, D. L. McQueen

Housing and Social Capital, Royal Commission on  
Canada's Economic Prospects, 1957

"Trends in Industrial Location in Canada"

D. W. Slater

Resources for Tomorrow, Background Papers, Volume 1, 1961

PART III - SHAPING THE REGIONAL DEVELOPMENT PROGRAMME

"Economic and Physical Planning: Coordination in Developing Areas"  
Charles Hoar, Benjamin Higgins, Lloyd Rodwin  
Journal of the American Institute of Planners,  
Volume XXIV, No. 3, 1958

"Regional Development Research"  
Patrick M. Dowling  
10th British Columbia Natural Resources Conference

"Development Planning for Depressed Areas: A Methodological Approach"  
Walter Stohr  
Journal of the American Institute of Planners, May, 1964

PART IV - THE INTERACTION BETWEEN ECONOMIC DEVELOPMENT AND REGIONAL ENVIRONMENT

"The Need for an Ideal"  
Stewart Bates  
Community Planning Review, December, 1955

"Observations on Canadian Cities"  
E. T. Rashleigh  
PLAN, Canada, Volume 3, No. 2, 1962

"Economics and Conservation"  
G. K. Goundrey  
The Canadian Journal of Economics and Political Science,  
May 1960

"Recreational Land Use"  
Arthur Glickson  
Man's Role in Changing the Face of the Earth, Chicago  
University Press, Chicago, 1956



PART V - THE ROLE OF PRIVATE AND PUBLIC INVESTMENT IN REGIONAL DEVELOPMENT

"Industrial and Social Capital"

Yves Dube, J. E. Howes, D. L. McQueen

Housing and Social Capital, Royal Commission on Canada's  
Economic Prospects, 1957

"The Political Economy of Urban Changes in Canada"

David W. Slater

Queen's Quarterly, Winter, 1961

"Capital Investment and Economic Progress"

H. Scott Gordon

Social Purpose for Canada, Michael Oliver, 1961

"Requirements for the Development of Renewable Resources in the  
Frontier Regions of Canada"

Peter M. Stern

Resources for Tomorrow, Volume 3, 1962

PART VI - IS REGIONAL GOVERNMENT NECESSARY?

"The Concept of a Planning Region"

John R. P. Friedman

Land Economics, XXXII, 1, February, 1956

"A Concept of Rural-Urban Regions"

John Kinsel

Community Planning Review, September, 1957

"The Form and Structure of the Future Urban Complex"

Catherine Bauer Wurster

Cities and Space, Resources for the Future, 1963

"Agenda for Regional Government"

Eric Beecroft

Canadian Federation of Mayors and Municipalities, 1963



**INTRODUCTION**

**TO**

**REGIONAL DEVELOPMENT**





# INTRODUCTION TO REGIONAL DEVELOPMENT

The occasion for the publication of these papers is the Ontario Conference on Regional Development and Economic Change (February 15-17, 1965). As such they have the specific purpose of defining the questions, and suggesting fruitful lines of thought for approaching the issues that are the concern of the Conference. To serve this purpose the papers have been grouped around five main discussion themes - the location of economic activity, the elements of a regional development program, the relationship between industry and environment, the role of private and public investment in regional development, and regional organization.

While the provocation for this volume is the conference, its deeper cause, as with the conference itself, lies elsewhere. We seem to be at a point in the development of this province where many forces are converging to create a widespread interest in exploring new approaches to responsible action at the regional level. Some of these forces are:

- (1) - The continuing concentration of new economic growth and population in a few big city-regions.
- (2) - An increasing sensitivity about the disparity in economic and general cultural opportunities between the different regions of the province.
- (3) - The spilling of urban settlement far beyond traditional town and city boundaries.
- (4) - The need to organize services on a scale that surmounts present municipal boundaries.
- (5) - Tax and service inequalities within single urban-centered regions.
- (6) - Worry about the pressure of population on water, the atmosphere and productive land.
- (7) - An increasing demand for recreation space coupled with anxiety about retaining unique natural areas.
- (8) - Increasing dissatisfaction with the contrast between the possible and the actual in the standard of new urban development.
- (9) - A growing gap between consciousness of problems requiring treatment at the regional level, and the institutional and financial means for coping with such problems.

- (10) - An increasing awareness of new techniques of regional development, which include new opportunities for financial assistance in studies and capital programs.
- (11) - The demonstration of the possibilities of success, through effective organization, of meeting some of the problems of regional development in Ontario and other provinces.

The February conference is primarily concerned with those of the above issues that relate to economic development, and which fall within the scope of "regional development" efforts. This is by no means a narrow field - as the initiating Regional Development statement of ten years ago testifies: the "Program was designed to aid the economic growth of Ontario through analysis, planning and coordinated direction on a regional basis of all phases of development. The Program is broad in its scope, in order that it might be adapted by the people themselves to meet the needs of their own particular regions, and that municipal, regional and provincial activities may be coordinated to support the economic development of the Province as a whole."

A framework of this breadth is perhaps not unsuitable for considering the forces of regional change. Most of the issues that have been cited are a symptom of the enlargement of the scale of problems of economic development, services, planning and government - a tendency which is rooted in the conditions of our industrial civilization and certainly not confined to Canada. Within about a century, these problems have moved from a focus on the cluster of farms, to the village, to the town, to the township, to the city, to the region, to the network of regions. At each successive stage up to "the city" our progenitors have been able to develop institutions that measured up to the needs of the day. The challenge of the present is to find ways of coping with the problem and needs that now exist in the new regions - the urban-centered regions that focus on our towns and cities and which are parts of larger economic complexes. These papers, as the conference they serve, are at once an attempt to participate in this quest, as well as to consider the regional problems related to economic development and the requirements of effective development programs.

The papers are presented for the role they can perform in clarifying problems and inciting lines of thought that will lead their readers to participate creatively in their solution. A brief account of their contents is presented, not as a digest, but to indicate something of their flavour and utility and, hopefully, to whet the appetite.

"We live on a razor's edge," writes Wreford Watson. The greater part of our land in Canada is just on the fringe of optimum living and growing conditions. This life on the margin, together with our increasing economic and strategic importance, behoves us to plan and to plan regionally. "National and local interests meet in the region.

The basis for planning should therefore narrow down from the nation and broaden out from the city to become the region."

Blumenfeld cuts the knot of regional definition neatly. It is an area "within which interaction is more intense than is its interaction with other areas." And he adds wisely - "There is no such thing as an ideal boundary for a planning region, but the fact of its adoption adds a new condition which makes it more adequate."

The "Resources for Tomorrow" paper sees regional development, concerned with "economics", and regional planning preoccupied with

"environment" as part of a single evolutionary process, moving "from an emphasis on overcoming the waste and misuse of resources to providing a guide for the optimum use and development of the region's resources and locational advantages; and from a preoccupation with halting the deterioration of environment to the creation of the best possible physical setting for the community's life."

Perloff and Dodd achieve a masterful summary of the requirements of development policy. These are stated in terms of four kinds of investment, in human resources, in plant and equipment, and in social overhead. It is a development concept which puts into perspective, and relates, such disparate factors as education, forest management, the modernization of industry, and investment in efficient and attractive cities.

This same study throws light on the relationship between the nature of a region and its pattern of economic development. They write; "Looked at in terms of relative advantages in resources, markets, human skills and labour costs, amenities, climate, and transport facilities and cost, some areas can hope to grow mainly by attracting labour-intensive industries; others, by attracting certain kinds of processing industries using relatively unexploited natural resources; some may have special advantages for certain types of assembly operations; still others for relatively intensive recreation activities, and so on. The concept of "input-output access" is put forward as a means of determining the growth potential of different regions. Yves Dube and David Slater explore the theoretical and statistical probability of a change in the present pattern of industrial location in Canada. Dube's conclusion that "those who favour a much greater relative dispersion of industry to smaller towns and cities should not feel assured that the movement will occur of itself, without special push or inducement" - is an admonition that will not go unheeded.

Out of the experience of Austria, Walter Stohr enunciates a concept of "regional development planning" which has relevance for Canada. "From the standpoint of policy", he writes, "it is often convenient to distinguish among three types of areas: core regions, neutral regions, and development regions. Within the first category, one of the main tasks is the rationing of space among competing uses. This is the traditional concern of physical planning. In the "neutral" areas a major issue is the direction of future growth to insure optional social returns. This will probably involve both physical and economic planning. In development regions, the main task is to stimulate social and economic development, to increase its pace, and to expand its scope". The technique of planning for "development regions" is outlined in terms of five essential steps: (i)- formulation of initial hypotheses, (ii)- systematic survey of information, (iii)- evaluations of area development needs, (iv)- determination of alternative development strategies, and (v)- preparing action proposals.

Both the Haar (and associates) and Dowling papers focus on some key inter-relationships in achieving sound regional development. A regional capital budget is envisaged as an organizing device for co-ordinating physical and economic goals - investments required for an improved environment are thus related to financial capacity and effects. Regional development programmers will be interested in this postulation of essential research scope: "There is a tendency to think of regional development research as solely a techno-economic endeavour. When it is realized, however, that a region may or may not grow depending on the nature of its leadership, attitudes, general living and working environment, government philosophy, etc., it becomes clear that sociology, psychology, law, and other disciplines may be involved in an analysis of a region's growth prospects".



The juxtaposition of the Bates, Rashleigh, Goundrey, and Glickson papers in a single volume offers an opportunity, if the reader persists, for fresh insights into the inter-action between economic development and the community environment in which it occurs. Between them, they describe conditions in mid-century Canadian cities, indicate the philosophical grounds for renewal of our environments, adjudicate between the need to both develop and conserve our resources - "The glory that was Rome fills no empty stomachs", and indicates the need and opportunity for "environmental reconstruction". The Glickson statement on "recreational land use" is a classic that deserves, and will reward, the most serious study.

On the subject of capital investment and economic progress, Scott Gordon, assuming the posture of social critic, makes some hard direct hits. His observations on the paradox of the vast demands for social capital - utilities, parks, services - generated by urbanization, compared with the limitations of municipal capital budgets will not be disputed by many. He poses the dilemma this way: "I pay annually in municipal taxes an amount only as large as I pay to heat my home. For this pittance I presumably am to expect the civic authorities to provide streets and sidewalks, water and sewage disposal, schools, police and fire protection, and a host of other services. Is it any wonder that many of these are provided in a fashion that is shabby to a degree?"

The general place of industrial and social capital in economic development, and of private and public enterprise (and regulation) in urban-based regional growth are defined in contributions by Yves Dube and David Slater.

Peter Stern's program for the economic development of northern forest regions is of interest to any comparatively isolated region. Starting from the premise that "relatively low wood cost and assurance of a long term, non-competitive wood supply for a mill large enough to benefit from economies of scale constitute the north's principal drawing card". Stern sets out a policy of government-initiated incentives to private enterprise, incentives to private enterprise, essential to overcome the disadvantages of distance from markets and the difficulties of the environment.

Finally, we are led through the wilderness of regional organization by John Friedmann who sets the stage with an unequivocal definition of a "city region", "the basic areal unit for carrying out comprehensive developmental planning below the national level, ...a region defined by an intricate pattern of economic and social interdependencies... a community informed of certain common interests; and above all, the locus of socio-economic power for a broader geographic area"; by John Kinzel who demonstrates the application of a similar concept (the trading area concept) to a Canadian province; by Catherine Bauer Wurster who cogently points out that variations in form and structure of urban-based regional complexes - from the concentrated super-city to the constellation of smaller cities - will lead to variations in the form and structure of government organization; and by Eric Beecroft who goes some distance towards answering affirmatively his own question: "Does it not appear that for reasons that reflect both our economic and social aspirations, we must find a formula for creating political jurisdictions in which the public can look squarely at the subjects or our regional agenda and in which our elected leader can be held responsible for making decisions thereon?"

While these papers, as far as their content is concerned, are submitted without apology, the editor is aware that they are not uniform in the grace of their presentation. Some are more technical than others. All, however, are presented because they are considered useful stepping stones in understanding the issues that are before the Conference on Regional Development and Economic Change. Their rebirth in this volume will have been justified if they do contribute to clarifying issues and encouraging intelligent action. This judgment is left to the tender mercies of the reader.



## **PART ONE**

---

### **Basic Approaches**



## APPROACHES TO REGIONAL DEVELOPMENT

HARVEY S. PERLOFF and VERA DODD

from "HOW A REGION GROWS" 1963

Republished by permission of the  
COMMITTEE FOR ECONOMIC DEVELOPMENT,  
711 FIFTH AVE., NEW YORK 22, N.Y.

Let us look at some general propositions about regional economic growth and area development.

1. Differential regional economic growth is an integral characteristic of our open, highly dynamic economy. As long as demand and supply conditions are subject to change, and regions have differing advantages and disadvantages for production, differences in regional growth must be seen as part of the total system, just as are economic specialization and division of labor. Periods of faster and slower growth over time may be expected for each region -- both in volume of economic activities and in levels of living. Each growth period poses its own set of problems. This is as true when a period of slower growth follows one of rapid growth, as it is when a region has been in economic decline for some time. Similarly, an extremely rapid change in the employment structure of a given area may bring into being almost as many problems as a slowing down in growth.

Given our highly dynamic economy, continuing change is inevitable and therefore continuing adjustment is unavoidable. Problems of adjustment are always difficult and do not readily yield to solution. The forces at work are extremely complex and include physical, social, cultural, political, and psychological, as well as economic, factors, and the booby traps are numerous. It follows that activities inhibiting the needed adjustment of individuals, industries, or regions can be serious drags on the required adaptation. Subsidizing industries for continuance in uneconomic locations would fall into this category, as would efforts to delay the migration of workers from areas with little employment opportunity.

2. All the elements that are central to national economic growth are seen to play similar roles at the regional level. Included are the role of natural resources development, the key roles of manpower skills and human resources improvement, of aggressive entrepreneurship, of infra-structure (including transportation, water supply, power, etc.) and the associated external economies, as well as the ability to take advantage of new opportunities offered by new technological developments. (At the regional level, in addition, we find an increasing role played by amenity resources and the relative attractiveness of living conditions.) While we have come to take for granted the importance of these elements in national development -- particularly with our current concern for aid to underdeveloped

countries -- their importance at the regional level is not fully grasped. Too often hucksterism, or the selling of the advantages of a given locality, is substituted for the more realistic concern for basic developmental forces. While there are very real limits to the developmental potential of any one region at any one period in time, judging by the more successful "area development" efforts, there is considerable play within these broad limits.

3. Our study has underlined how important for growth of given regions is their capacity for attracting national industries -- i.e., industries that produce goods for export to other regions of the country. Expansion of the export industries is at the core of regional economic growth. But substantial "internal" economic development is equally important. First, the direct and indirect impact on local income and employment of export industries covers a wide range from very great to relatively little; this is true of both the linked-industry effect (expansion of business services, the local manufacture of parts and equipment, etc.), and the effect on increased consumer expenditures. Second, "internal" factors have much to do with expansion of the local market and the extent to which this attracts industries producing for it. The kind of income distribution characteristic of a given region, for example, will affect the extent to which the local market develops.

In this context, growing market orientation and the tendency toward equalization of wages among regions are extremely important. The latter has been due to many factors, including over-all growth in national income, decentralization of industry, migration, unionization, minimum wage regulations, and the like. This is a slow and far from dramatic trend, but is firmly established. The narrowing of wage costs overtime reduces their significance as a consideration in the location of economic activities and increases the significance of other factors. Over time, fewer and fewer industries are labor-oriented; market considerations, particularly, loom ever larger. This suggests that, where choices are possible, development policy should welcome new industries even though they push up wage levels.

4. "Growth" industries -- those that are expanding in employment at a rate exceeding the average for all industries -- favorably influence growth in the volume of economic activities within a region. But a region may grow by gathering in a greater and greater proportion of the slower growth industries. Also, industry aggregates include a variety of industrial subcategories, some of which are expanding more than others. Regions may experience growth even when they specialize in those industrial activities, such as agriculture or mining, which as a whole may be on the decline. As a matter of fact, regions can be somewhat like individual firms. Just as some farmers, or some coal mining firms or shoe manufacturing firms, tend to make extremely attractive profits and to increase their output in situations where competing firms are having serious trouble, so there are farming and mining and textile areas which, by intensive production and the growth of linked service activities, can experience growth when other areas with similar kinds of specialization are declining. Regions that are worried about a decline can learn some useful lessons from the flourishing firms in generally declining industries.
5. Also, while it is obvious that certain industries are more conducive to regional growth than others, not all regions have the relative advantages as to input-output access (i.e., relatively easy or cheap access to raw or semi-processed materials and to skilled and unskilled labor for their inputs, and to final or intermediate markets for their outputs) enabling them to attract such industries. Many can expect to grow only slowly on the basis of the industries for which they do have special advantages. In terms of such relative

advantages as resources, markets, human skills, amenities, climate, and transportation facilities, some areas can hope to grow only by attracting labor-intensive industries; others by attracting certain processing industries which exploit relatively untapped natural resources; some may have advantages for certain assembly operations; still others for relatively intensive recreation activities, etc.

Attraction of industry is a competitive matter. A realistic appraisal of the region's relative advantages and disadvantages with regard to input-output access is an essential starting point for an understanding of its growth potential.

6. We have noted a spreading out of industry to the western and southeastern sections of the country, attracted by resource possibilities and even more by the newly evolving and rapidly growing regional markets. However, this decentralization is highly selective in geographic terms, involving essentially the growth of great regional production centers, often at the expense of surrounding rural areas and nearby small towns. The growth of large urban regions represented by such communities as Chicago, Minneapolis-St. Paul, Los Angeles, Atlanta, New Orleans-Baton Rouge, and Dallas-Ft. Worth, suggest this kind of development. The evolution of a complementary relationship between smaller production centers and large regional centers would seem in many cases to be a critical element in the growth of the smaller communities. In fact, what we seem to be observing is development within the western regions and the Southeast of "a hierarchy of cities," involving a large base of smaller communities, going up to the larger cities and state centers, on up to great regional centers -- a phenomenon clearly associated with urban-industrial growth and one experienced much earlier in the northeastern part of the nation.

The clustering of economic activities into these great urban regions as well as into smaller urban centers has important implications for developmental efforts. The efficiency and attractiveness of urban communities become a significant ingredient in regional economic growth. City planning needs to be seen as a key weapon in area development.

7. We have seen that levels of living are closely tied to relative wage rates within regions, that these in turn are related to labor productivity, and that labor productivity is greatly influenced by the capital-labor ratios which characterize industries within each region, as well as by competency of management, labor skill, and effectiveness of industrial organization. A high capital-labor ratio is an important ingredient in providing a high level of wages within a region, but the relative use of capital as against the use of labor is itself related to wage level differences among the regions. Where wages are lower, more labor and less capital tend to be employed. Where population growth exceeds growth of employment opportunities, wages can be relatively depressed.

The fact that wages within certain regions have lagged behind those in others is not by itself enough to attract a large inflow of capital into the poorer regions. Flows of capital alone, therefore, need not bring about an equilibrium where wages for similar levels of skill are comparable throughout the nation. This suggests why additions to, and even existing members of, the labor force within a given region may not be fully employed and wage levels may be depressed. Under such circumstances, it is only through out-migration that upward pressure on wage levels can be exerted and per capita income raised.

As a general principle, it can be said that in a town or rural area where workers are paid substantially less than they could make elsewhere and where a basic change within five years or so is unlikely, a shift of some of the population out of the area might be just as important to the region's economic future as efforts to promote economic activities. Over-



populated depressed areas tend to pull wage levels down all around and to be a drag on forward movement.

Every region in the country cannot hope to experience equally rapid increases in the volume of economic activities and in population. But every region can hope to enjoy a high and rising level of per capita income (as long as the nation's output and productivity increases), if it is willing to face up to the need for a degree of "emptying out" when the over-all situation with regard to relative advantages among regions calls for it.

In most such instances, significantly higher income levels can be achieved only by combining an effective economic development program with substantial out-migration. The experience of Puerto Rico is suggestive in this regard. It has taken a brilliantly conceived and executed economic development program, coupled with a rate of out-migration over the past decade high enough to keep the island's population at almost a stationary level, to permit the Puerto Rican people to realize a substantial continuous increase in the level of per capita income. Puerto Rico has not hesitated to help the migrants. Such a twofold effort is called for in a number of regions in the United States.

Encouragement of out-migration, under the appropriate circumstances, is dictated by two considerations. One is related to national economic progress. As far as the national economy is concerned, it is evident that the nation gains when the productive activities take place in those areas where net returns are highest. Anything that prevents an optimal locational pattern -- such as continuing subsidy of industry in certain locations -- can dampen national economic progress.

The other consideration is related to the welfare of individual families, for whom opportunities for jobs within the different parts of the country change over time. The ability of an individual to improve his lot by moving may have been most dramatic in the frontier-pioneering period, but it is a significant element in our type of system at all times.

One can infer from these two principles that a given regional growth pattern or type of development can be deemed "good" only when it contributes the most to over-all national advancement and also optimizes the employment and income-earning opportunities of individual families. Over time, with changing national demand-supply situations, this may mean a more or less rapid growth of population and economic activities within a given region. It follows that long-run national economic progress and long-run family welfare deserve a central place in any program looking toward regional development.

At the same time, however, the personal and social costs of migration cannot be overlooked in a democratic nation concerned with over-all welfare. It is unlikely, in fact, that an effective approach to migration can be implemented without consideration of ways to cope with these costs.

8. It is an essential ingredient of a sound program of economic development to encourage the location of new industries and work force in the most advantageous locations. In this, not only input and output factors over the foreseeable future must be weighed, but also the social and cultural opportunities likely to be offered to people at every stage of their life, but particularly when they are young. Many of our present depressed areas are by no means favorable environments for the growth of future citizens. Efforts to maintain economically and culturally poor areas of this kind are unlikely to produce long-term advantages, either for the nation or for more than a small proportion of the residents. Other localities that are in economic difficulties, however, possess useful social overhead facilities and good location, and have long provided an attractive social and cultural environment. Having a substantial investment in such communities, the

nation can well afford to take costly measures to protect its investment -- if there are good possibilities of at least stabilizing the situation and preventing further decline. The protection of investment under appropriate circumstances is as sensible an objective for the nation as for the individual firm; but so is the write-off of investment when the situation calls for it.

9. The problems of subnational economic growth are so difficult and all-pervading that they must be recognized as the responsibility of all levels of government -- from the local communities, through the states and multi-state regions, up to the Federal government -- and of private groups at all these levels. While the local and state responsibility for economic development is increasingly being accepted, and while private groups have long taken a strong interest in the question of local economic growth, the Federal government's role has not yet adequately been defined.

The Federal government has taken an important step in recognizing national interest in subnational economic growth with the passage of the Area Redevelopment Act (1961), which is essentially addressed to the problems of depressed communities. While the focus on distressed areas may be quite appropriate from both humanitarian and political viewpoints, it should be recognized that from the economic standpoint (and also longer-run humanitarian considerations) the national interest and responsibility extend beyond the areas that already are in trouble. Efforts to prevent future distress and to cope with the problems of area adjustment to changing national conditions are at least equally important. The Federal government can help sound regional growth through strengthening information services, relating the development of natural resources (when carried out with Federal financing) to long-term regional economic requirements, providing flexible educational assistance to meet the different requirements of various regions, and through related efforts.

10. Given the complexity of regional economic development, it would seem particularly important to work out public policies that are realistic and selective -- policies, that is, that relate effectively to the constantly changing national, regional, and local scenes. National and regional information programs, an awareness of regional needs, and encouragement of local planning are essential. Effective development programs require a firm foundation of detailed, up-to-date knowledge and continuing research. It is necessary to know what is happening, to "take the pulse" of the regions, states, and metropolitan areas on a continuing basis. And it is necessary to plan the development activities with great care and sensitivity.'

High-caliber study and planning agencies within the various metropolitan communities and rural economic regions, as well as within the states and multi-state regions, are needed to probe continuously the problems and consequences of economic and other changes that are under way or projected, and to point the direction for sensible programs to cope with them. Not only area-wide problems and programs need attention, but groups with special economic problems, such as the non-whites, the young untrained persons, and the aged. Some states and communities have already started efforts along these lines but it is only a small beginning.

11. Key element in developmental policy. While specifics have to be worked out in every case, the broad requirements of developmental policy are suggested by the propositions discussed earlier, as well as practical experience. These can be summarized in terms of the needs for various kinds of investment: in human resources, in development of natural resources, in plant and equipment, and in social overhead.

(a) Investment is needed first in the human resources -- to develop skillful, well-equipped individuals. This is a costly but key requirement for economic advance. An intensive effort to improve education, to



prepare young persons for a lifetime of skilled, productive work, is the keystone of any development program.<sup>2</sup> Compared with other governmental measures that have been proposed, public investment in education promises the greatest relative returns. It might include Federal and state funds specifically provided for the low-income areas -- with both total expenditure per pupil and the nonlocal share increasing in inverse ratio to the average level of income in the area. Such an effort might well focus on the establishment of quite large consolidated schools, bringing in students over a wide area, staffed by well-paid teachers, and providing far better than average general and vocational education. A highly developed system of vocational guidance should be attached to such consolidated schools. This would also be the best and most effective measure to help wipe out underemployment. Educated skilled persons can be counted on to seek out good employment and income opportunities and, equally important, situations favorable to continued development of the individual.<sup>3</sup>

- (b) Investment is also needed in the development of natural resources. Here the Federal government's role can be significant, particularly if it were to seek to relate resource development in every region of the country to its special needs and possibilities. The states and regions have an equally large role. In some regions, the foundations for economic activities can be broadened and strengthened through the intensive development of under-utilized natural resources, such as forestry, water, and recreation (or "amenity") resources when such development promises -- on the basis of realistic study -- to attract new industries and service activities. Amenity resources can strengthen the economic base and are an appropriate subject for prudent investment.<sup>4</sup>
- (c) Investment in plant and equipment and in infra-structure is the third leg of the development stool. In parts of the country that are characterized by very small, poorly equipped farms, incomes in farming can be raised in many cases by enlarging farms and by raising the productivity of farm labor through increased equipment (unless national policy were to dictate the taking of land out of agriculture in these areas). Encouragement of modernization of industry is another requirement, particularly in the older sections of the country. Techniques for encouraging such modernization have yet to be worked out but it deserves the best thought that can be given it. Investment in social overhead -- in efficient and attractive cities, in transportation, and in other public facilities and utilities -- is everywhere a basic need for sound economic growth.

Investment - in human resources, in natural resources, in capital facilities -- this has always been the classic road to economic advance, and it still is.

#### Footnotes

<sup>1</sup> See Committee on Regional Accounts, Design of Regional Accounts, edited by Werner Hochwald (Baltimore: The Johns Hopkins Press, 1961), and Charles M. Tiebout, The Community Economic Base Study, Supplementary Paper No. 16, Committee for Economic Development, New York (December 1962).

<sup>2</sup> The importance of education in this context has been stressed in two valuable CED reports, Paying for Better Public Schools and Distressed Areas in a Growing Economy.

<sup>3</sup> An important, if relatively small, start to advance training (and thereby assist the mobility of workers) has been made in the Manpower Development and Training Act of 1962.

<sup>4</sup> A noteworthy effort to strengthen resource development on a broad regional basis is being carried out by the Upper Midwest Research and Development Council. The studies and work of this group deserve the attention of all those interested in problems of regional economic growth.

# **BASIC PROBLEMS OF REGIONAL PLANNING IN CANADA**

J. Wreford Watson  
Community Planning Review, Vol IV, 1954

Republished by permission of the  
Community Planning Association of Canada,  
425 Gloucester St., Ottawa 4, Canada.

No country has more to gain by planning than that country which has most to lose by not planning. Canada has a great deal of wealth for its population, both in resources and in skills. It has forged ahead because of the free development of that wealth. Consequently the stress has been on enterprise rather than planning.

However, the situation is changing. In the first place, enterprise has created problems, particularly in the exceptionally high concentration of endeavour in the city, which call for planning if they are to be resolved. But more than that: the general environment has changed, making Canada's position, its resources, its room for development, and the nature of its growth, of more vital concern to the world than ever before. This fact is a new one in Canadian history and, therefore, may cause a new appraisal of Canadian progress. In the author's opinion, such an appraisal would stress planning as an essential adjunct to enterprise.

This paper will take up four major problems that have come to the fore in recent years and indicate how they apply at the national, local, and regional levels.

## CANADA'S NEW STRATEGIC IMPORTANCE

The first major problem lies in Canada's new strategic situation. This country, once on the margin of the geography that mattered, is now at the centre. It is the only country in the world directly between the U.S.S.R. and the U.S.A., the poles of world power today. As such it guards the most strategic approaches to the western hemisphere: namely those from the northeast, across the North Atlantic and Labrador; those from the north, across the Arctic Ocean and the Canadian Arctic; and those from the northwest, across the North Pacific and Yukon and British Columbia. Indeed, Canada has a longer frontier on the strategic oceans, and air-lanes of the world to-day than any other nation, not excluding the Great Powers.

Since the shortest crossings to this continent are from the north, attention has been focussed on that area. The north was once an almost negligible region in world affairs, prior to the use of long-range aircraft, but is now of extreme importance. Consequently, its development presents a great challenge to both enterprise and

planning. It forces us to ask the questions: how far should we go in its development, where should we start, and how should we proceed? Obviously since the national interest is involved, the nation as a whole should take a look at the problem. But when it does so, it sees that the whole area is not equally suited to development. On the contrary, development will have to concentrate on those regions best suited to it, and those regions are few and far between. Because they are far between, in central Yukon, about Great Slave Lake, in Western Hudson Bay, in Northern Ontario, in Ungava Bay and central Labrador, they form unique cases and they can best be studied within themselves. Indeed, it is only after they have been studied in this way, in some detail, that the parts may be fitted together and a true, and worthwhile, picture of the whole be obtained. Thus, although the problem is national, it will have to be tackled regionally, and the regions will have to accept their responsibility and play their part.

But what does all this have to do with the man in the street, it might be asked. How does it affect city councils and town planners? Very vitally. For the geography of northern development hinges on a few gateways and on the cities that guard those gateways, such as Vancouver, Edmonton, Winnipeg, Toronto, Montreal, Quebec, and St. John's. It is from these cities that transportation routes will spring into the north, goods, supplies and personnel will be assembled for movement into the north, services will be concentrated and control be centred. In other words, planners developing Labrador-Ungava will have to start with base facilities at Montreal, Quebec, and St. John's. The development of new power sites and mineral resources far up the west coast will mean even more to Vancouver than to the lonely valleys where the actual exploitation will proceed.

It has been estimated<sup>1</sup> that the population of the north will increase by about 250,000 in the next few decades. It has also been estimated that such an increase will add over 1,000,000 people to the south. Most of the million will be added to Montreal, Toronto, Winnipeg, Edmonton, and Vancouver. Are we planning for that? Our cities have been dominated so long by an east-west axis, the reflection of our east-west mentality, that there is little evidence of planning for north-south facilities.

In other words, if the nation has to reach down to the region, the city has to reach up to it, and plan with widened objectives.

This is more especially true because of the new implications of mass destruction from air attack. If Canada as a whole is really in a critical geographical position, that puts each of its major cities in a critical position. Should such an unfortunate thing as another war break out, people might well be asking not, "Can London take it?" but "Can Toronto take it?", because Toronto is much nearer to the heart of industrial America and is closer to the direct routes there from Northern Europe and Siberia than is London.

Since the powers of destruction have grown enormously with the hydrogen bomb, our ideas of civil defence have grown as well. They are no longer centred in saving the city, but rather the region. They are not concerned mainly with rehabilitating the downtown area, but the whole "umland" or surrounding territory on which the city depends. Cities are so dependent on their regions and on each other that widespread destruction in any one centre would cripple transportation and industry over an extensive area. Therefore, we have to plan for industry, transportation, housing, and services throughout that whole area. And this is something the town planner must realize, even if called on to plan simply for a city or municipality. The atomic bomb has put town planning for the sake of the town alone out of date.

## CANADA'S NEW ECONOMIC IMPORTANCE

A second major problem for Canada is that it has acquired new and much greater economic significance. Our resources are in wider demand than ever by other countries and, consequently, are in greater danger of being exploited. Both Western Europe and the United States have depleted their reserves of some of the fundamental commodities of modern industry and are being compelled to look to under-developed countries. Even the United States, which for so long was a net exporter of most of these commodities, has become a net importer.

In a speech to the Mid-Century Conference on Resources for the Future, Charles P. Taft<sup>2</sup> asks the question:

"Can we (i.e., the United States) supply our essential basic raw materials from within, or not? The answer is perfectly simple. We cannot. We import 7% of our iron, 11% of our wood pulp, 12% of our oil, 22% of our zinc, 31% of our copper, 52% of our lead, and 96% of our manganese. Certainly we should encourage exploration in the United States for all these items. But we are not going to be able to make ourselves self-sufficient."

Why? The answer has been given, in part, by Professor Renner<sup>3</sup> in his book *Our (i.e., U.S.) National Resources*. In this he says:

"After a mere 150 years of American existence some 85% of our wild game is gone, 80% of our timber has been cut, about 67% of our petroleum reserves, 65% of our lead and zinc (60% of our high grade iron ore) and 52% of our copper have been used up, while at least 10% of our cultivable land has been ruined beyond repair. Yet 150 years represent only the lifetimes of two men-what a disastrous pair of lifetimes."

The parallel is all too obvious for Canada. Would we want the same thing to be written of Canada 150 years after Confederation? One hopes not.

Canada faces a great economic opportunity in being able to make up for what other nations have lost. But does it not face a grave responsibility, at the same time; the responsibility to plan for the wisest use of these resources?

Again the problem is a national one, but again it cannot be answered by the nation alone. Canada is too large to allow any of its greater problems to be solved from the centre. And few people recognize that more than those who live in the centre. Our founding fathers recognized it and gave the primary responsibility for the use of resources to the Provinces. Surely that was because the problem of their use is fundamentally a regional one. The problem varies so much from region to region that those people can handle it best who are closest to it and realize its unique nature. Of course the nation must see that a balance is kept between the regions, and that neglect in one does not prejudice effort in another. Also it may help out where the region simply does not have the money, skills or personnel to solve its own problems, as was the case with the setting up of the Prairie Farm Rehabilitation Administration. But in the main the nation has given the problem squarely to the region to face and master. And must do so.



Unfortunately, within the region, many feel that the conservation of our resources is chiefly a rural matter. Consequently few, if any, town planners devote enough attention to it. Even in rural areas, the attack on the problem is very often on a township basis and does not take cognizance of the problem throughout the region. However, city and township are integrated so closely with their region that, should that region change, they will change too. The city is peculiarly sensitive to such change because it is the heart of the region. Most cities dominate and are dependent upon river basins. Lack of conservation in the back parts of these basins can decrease the water supply, cause the gravest irregularities, in river regimes, and even, eventually, affect the climate. Such changes will certainly affect the city. Indeed, the lack of a good water supply is already one of the major limiting factors to city growth in the United States.<sup>4</sup> It is claimed that while the U.S. population may increase by about 25% by the end of the century, the demand for water could increase by 95%. This demand is already serious enough in Ontario, particularly in the Thames and Grand River valleys. How much more serious it could become if town planners forgot to urge the necessity of planning for the whole region of which their city formed but a part? The lack of conservation through the nation as a whole would nowhere hit harder than in the city.

#### THE PSYCHOLOGY OF WASTE

A third major problem arises out of the first two but is fundamentally psychological. It lies in the psychology of waste. So many people feel that this country is so well placed and so well endowed that it has an ample margin for error or waste. They assert, consequently, that it does not stand in need of planning. A visit was once paid a friend who had bought out a beautiful orchard in order to subdivide the land for housing. It was suggested to him that this was a waste. "That's because you come from the Old Country," was the rejoinder. "Don't you know Canada has enough land and to burn?"

There is no greater fallacy. True, Canada is well placed, and its setting alone will give it importance and bring it trade. True, it is well endowed. But it does not have a margin for waste. It does not possess "land and to burn". Vast though our country is, and rich though it may be, it is actually on the border-line of safety and success. Yes, we are the second largest country in the world; but only 7% of the land is occupied, and only 4% improved.

The fact is, our climate, soils and topography put much of the country on the verge of habitability. We live in a difficult environment. We are not far removed from the last ice age. Nearly all of Canada was swept by ice and suffers from huge stretches of barren rock, intractable moraine, or useless swamp. Even in southern Canada there is an astonishing amount of land that is unfit for anything. To get our wealth we have to struggle for it, and in that struggle there is little room for waste.

Indeed, few parts of Canada have optimum conditions. Perhaps the dairy belt in Ontario and Quebec, potato farming in the Maritimes, the spring wheat belt in the Prairies, and the subarctic forest come as near to optimum conditions as we have. But in all these areas, past glaciation and rugged topography render much of the land quite marginal. The greater part of the land is just on the latitudinal or altitudinal fringe of optimum conditions. We live, as it were, on a razor's edge. Take Ontario, for instance: in the southwest it is just on the fringe of sweet corn, sugar beet and tobacco production; in the Niagara peninsula, on the fringe of

peach, nectarine, and apricot production; in central Ontario, on the fringe of apples and commercial vegetables; and in northern Ontario, on the fringe of certain forage crops and small grains. In every case there is just enough opportunity to encourage enterprise, but enough hazard to demand the most careful adjustment.

It is stated by Mr. Jenkins<sup>5</sup>, the United States chief agronomist, that the optimum summer temperature for sweet corn is 77°, though good yields can be raised down to 70°. The average summer temperature in south-western Ontario is 70°; that is, exactly on the margin. In most years the crop does all right, but in 15% of the years it experiences below average temperatures. Consequently, farmers have to plan in the most careful way to use the soils and drainage that will offset climatic hazards.

Similarly, it is claimed by Mr. Magness<sup>6</sup>, the United States' chief pomologist, that peaches do not do well where July temperatures fall below 70° and that they suffer critical tree injury where winter minima are below -15°. The Niagara peninsula has a July average of 71°, and so is just within the good peach growing zone; but it experiences occasional winter minima of -16° or lower, when extensive damage to trees is suffered.

Again, these facts can best be appreciated on a regional basis. A national plan might tend to write them off, because it could not measure their wide ramifications throughout the province. On the other hand local plans take very little cognizance of them. Cities argue that they are not bound by isotherms but can be built practically anywhere.

Well, in the first place, cities never are built practically anywhere. They are built where they can best do business. And they can best do business where they are most accessible to raw materials and markets. Consequently, they are vitally concerned with where raw materials can best be grown, that is, with the whole question of optimum or marginal production. The city dweller looks out and sees millions of acres of land and says there is "land and to burn". But if he starts burning up the only good land there is, what is left to him will not keep the factories humming.

Good land is at a very high premium. It does not take much to "burn it up" or change it. If the climate of Ontario got cooler by a degree or two, its cities might conceivably not have factories making corn flakes, beet sugar, cigarettes, and canned fruit. At least, they would have to assemble their raw materials from a considerable distance at a higher cost. In a highly competitive world that might be the difference between success or failure.

Let me say at once that there is no likelihood of such a drastic change in climate. At least, not in the physical climate. But suppose there were a change in the climate of the mind and people said "it is too much effort to make the constant adjustment required to grow corn, sugarbeet, tobacco, or fruit", the result would be the same.

Now, it is suggested that such a change in mental climate is not only possible, but that it is happening. Many orchard owners have given up farming and sold out to interests in Hamilton or St. Catharines because they have got the idea that the complete invasion of the Niagara fruit belt is inevitable. Once a substantial number think that way, then the climate of opinion may alter, and we may say goodbye to the fruit belt with as much finality as if a new glacial age were advancing on us.

This change is happening. And it is happening amongst other things, because the towns and town councils have paid scant attention to

the problems of growing fruit, or anything else. Indeed, councils seem most anxious, when they are planning annexation, to take over the soils and climates most suited to fruit raising, etc. They have done so because they have been thinking only of the towns, and not of the regions in which their towns are set. Such thinking is calamitous.

#### COMPETITION BETWEEN USES OF LAND

This raises the fourth and last problem. It is, basically, that of the competition for the use of land. When we belong to one group we naturally go after the best land we can get. For instance, turning to the vexed problem of the fruit belt, the city dweller is possibly quite justified in saying, "Why shouldn't towns go out and get the best soils and best climate? We can surely buy enough peaches from Georgia and corn from Iowa to meet our needs, provided we produce enough goods to buy them". That seems to be a sound argument. The success of city life in peninsular Ontario is to be explained, in part at least, by the fact that here is the best climate in Canada, outside of coastal British Columbia, and here are excellent gravel terraces and sandy outwash plains, which, when stripped of peaches, make ideal ground for city sewers.

The tragedy for Canada is that in such a vast country, the best sites for its cities are limited to the best sites for so many of its most highly specialized crops. Surely there ought to be room for both in a huge land like Canada?

There does not seem to be. Our really favoured environments are so few, and they cover such a small part of the total land area, that there is the fiercest competition for their use. Indeed, it could be argued that the competition for them is little inferior to that which rages in a small country like Britain. It is completely erroneous to believe that because we are so large, there is no pressure for space and, therefore, that we are not in need of planning. The sooner we kill that idea in Canada the better.

Once again, although the nation as a whole may be aware of this problem, it cannot measure it except after studying it region by region. In actual truth, one doubts if we are aware of the problem. Canada is one of the few modern states that does not have a land use map, showing what are the principal uses of land and where and to what extent they do compete with each other. The U.S.A. has a land use map on the scale of 1:5,000,000 or roughly 125 miles to the inch. Britain has a map on the scale of a mile to the inch. These countries are able to tell just where their horticultural land, or market gardening, or urban land, or land under various types of field crops, occurs, and so on. By examining trends they can see where competition is fiercest and, therefore, plan for a more rational use of land. We cannot, because we have not made the regional studies from which, and from which alone, the national picture can be obtained.

And that is not surprising because, at the local level we have not really cared. Very few cities have made an appraisal of all the land in their hinterland, of how much land of different categories they are likely to take over, of the extent of competition with other users, and of how that competition should be resolved, not only for their good, but for the good of the region as a whole.

In fact, relatively few settlements have even made a land utilization survey within their own border.

The city is one of the great competitors for land, and therefore affects its region. This should involve it in regional planning,



whether it likes it or not. The problem is acute from coast to coast. In the Halifax area, the city has expanded so much that it has taken over nearly all the well drained, fertile "drumlins" in the vicinity, notwithstanding the fact that these drumlins have been singularly favourable to agriculture in a locale that is otherwise singularly unfavourable to it. But if the farmers should ask of city dwellers "Why don't you build on non-agricultural land?", the citizens might reply, "Why build on rock when we can get drumlins" Anyway, why farm when you can sell out to a real-estate agent?"

At Vancouver, Professor Robinson recently read a paper on Planning for Agriculture. In this he reminded his audience of an earlier warning he had made.

"Two years ago, I emphasized the danger in the trend of expanding residential settlement onto the good agricultural land in the Fraser River Delta. Every year, 100 to 200 acres of excellent dairy or truck garden land disappears into the non-productive classification of housing. Already, Vancouver's agricultural hinterland in the Fraser Valley cannot supply sufficient food for the urban metropolis, and yet we continue to allow agricultural land to go out of production and, therefore, increase our food costs. There might be some arguments for this trend, in terms of the space needed for productive commercial or industrial workers, if it were not for the fact that large empty areas still exist in Greater Vancouver, located on non-productive, coarse, glacial soils. On a regional basis, housing should go on non-productive land, leaving the good soil to feed the growing population."

Alas! For a country of 3 3/4 million square miles there seems to be all too little of that sort of land which is fit for us alone, and all too much of the coarse, glacial stuff to which to confine everybody else!

#### CONCLUSION

The conclusion of the matter might be summed up as follows:

Canada's new strategic and economic position gives it more opportunities than ever. But these opportunities call for a new sense of responsibility. Planning is one of the chief methods of meeting our responsibilities and making use of our opportunities. Therefore there is a new need and urgency for planning. In this, both national planning, is scarcely desirable, even if feasible. On the other hand piecemeal planning on an ad hoc basis in pin-point locations is not going to solve our problems. National and local interests meet in the region. The basis for planning should therefore narrow down from the nation and broaden out from the city, to become the region.

This is not to say that there is no call for a national policy. There is. But it will be strengthened if it becomes a synthesis of regional studies. Similarly, there is obvious need for planning the minute concerns of municipalities; but these will be made more stable if fitted into the framework of the region. When land is studied from a regional point of view, we are no longer interested in the claims of one use alone, and for itself. On the contrary, we try to work out a basis for the mutual dependence of all the uses, recognizing that they are all dependent on the region.

Planning is especially needed in Canada because the great expansion that is going on is taking place within real restrictions. Although the wealth of Canada is vast, the areas in which it can best be

developed are limited, and competition for land is keen. No development can ignore the region which gives it birth, otherwise it may become a cancer in the region, ultimately leading to its own decay. If planning were to make the region its fundamental basis, it could build city and farm and other users of land into the region in such a way that there would be a chance of building the region into the nation, to the assured prosperity of all.

<sup>1</sup>Watson, J. W., *The Pattern of Canada's Post-War Development*, Geography, July, 1954.

<sup>2</sup>Taft, C. P., *How Much Should We Depend on Foreign Resources?*, Mid-Century Conference on Resources for the Future, Dec. 3, 1953, Washington.

<sup>3</sup>Renner, G. T., *Our National Resources*, New York, p. 3

<sup>4</sup>Borchert, J. R. *The Surface Water Supply of American Municipalities*, *Annals of the Association of American Geography*, Vol. XLVI, No. 1, (Mar. 1954).

<sup>5</sup>Jenkins, Merle, *Influence of Climate and Weather on Growth of Corn*, in *Climate and Man* (Washington, 1941), pp. 308-320.

<sup>6</sup>Magness, J. R. and Traub, H. P., *Climatic Adaptation of Fruit and Nut Crops*, in *Climate and Man* (Washington, 1941), pp. 400-420.

<sup>7</sup>Robinson, J. L., *Dwindling Arable Lands in British Columbia*, *Proc. Regional Conf., Community Planning Association of Canada*, Vancouver, July 1952, pp. 15-20.

## REGIONAL PLANNING

Hans Blumenfeld  
PLAN Canada, Vol. 1, No. 2 June 1960

Republished by permission of the

Town Planning Institute of Canada,  
Board of Trade Building,  
11 Adelaide St. W., Toronto 1, Canada.

Regional planning is the extension of planning into a new field. Like all planning it means exploring interaction and attempting to order all actions so that they will help rather than hinder each other.

This new field has been approached simultaneously from two directions, both of which have gradually enlarged their scope; on the one side from local, physical, planning; and on the other from segmental or departmental, functional planning. It lies in the nature of planning as a discipline concerned with inter-relations that it must constantly expand its field of study and of action, as it discovers ever wider and more complex interrelations and attempts to influence them. But in addition to this "subjective" reason for the expansion of planning into new fields there is an even more important "objective" one, deriving from the nature of contemporary society.

It is a commonplace that the world is getting smaller. With the development of means of transportation and communication local isolation is being broken and what was once an unrelated event in a distant area now becomes part of the locality's own life. But it is equally true to say that the world is becoming bigger. There are three times as many people living on this globe than there were 200 years ago and they engage in more varied activities and transform the face of the earth more strongly than any previous generation. Ever new skeins are woven into the increasingly complex tapestry of life.

Because the world is getting smaller, town planning, the core of the work of the members of our Institute, is forced to extend beyond the boundaries of the individual community to encompass its surroundings and its relation to neighbouring communities, leading to comprehensive planning primarily of metropolitan areas but beyond that also of larger and more loosely connected regions.

Because the world is getting bigger, populated by more people making more claims on its resources, functional planning, the planning of the activities of an industry or of a government department, is forced to take into account other activities going on in the same area, on which it is dependent and which may compete with it for land, water or other resources. Out of the attempt to co-ordinate all functions within a given area has been born another type of regional planning, which on this continent is best represented by the planning activities of the Tennessee Valley Authority or the Commonwealth of Puerto Rico.

Functional planning and physical planning have developed as two different disciplines; but, as far as I know, only one western language, Russian, has developed two different terms; *planirovaniye*, regarded as a branch of economics, for the former, and *planirovka*, regarded as a branch of architecture, for the latter. They answer different though related, questions.

Functional, economic, planning asks: what to produce, how much, at what cost, when? and only in very general terms: where?

Local, physical, planning deals, from the economist's point of view, with one scarce resource, land. It asks primarily: where and how? However, it has increasingly turned to a study of the economic and social aspects of planning; by scheduling and "phasing" it attempts to answer the question "when?" and by capital budgeting the question "at what cost?"

On the other hand, functional planning, with increasing competition for land, has to deal very specifically with the question "where?" and with an increasingly complex technology, it must be able to answer the question "how?"

Thus the two types of planning converge and merge into a new discipline which we call regional planning. Our French colleagues who use the term "*urbanisme*" for "town planning" have coined the term "*amenagement du territoire*" for this discipline.

I will not attempt to touch that sacred cow, the definition of planning - the poor beast has been milked pretty dry anyhow - but I can not quite fail to talk about the definition of a region for planning.

The term "region" has long been used by geographers to denote homogeneous areas, such as the Laurentian Shield or the Wheat Belt. It seems to me that for a planning region homogeneity is not a suitable criterion. Planning is concerned with interaction and interaction occurs between heterogeneous elements which supplement each other rather than between homogeneous ones. It is often stated - frequently in exaggerated form - that any planning unit should be relatively "self-contained". The more homogeneous an area, the more it is dependent on supplementary activities in other areas; and consequently less self-contained. Therefore, heterogeneity, rather than homogeneity, is characteristic of a planning region. I would define such a region as an area within which interaction is more intense than is its interaction with other areas.

From this concept follow two important considerations. As interaction is impeded or facilitated not only by natural, but also by man-made factors, planning regions are defined not merely or exclusively by natural boundaries, but equally by political or administrative boundaries; most strongly, of course, by national borders, but to some extent by any administrative division. Therefore, the act of defining an area as suitable for planning administration does to some extent determine a region, not merely discover one.

However, the greatest care should be used to discover where interaction is most developed and where it falls off. Thus the concept of the planning region as an area of intensive interaction leads to the concept of the "watershed". Various methods have been developed to find the boundaries separating neighbouring "watersheds". The German geographer Walter Christaller in his pioneering work on "the central places in Southern Germany" used the number of long-distance telephone calls made from any given location to one or another "central place". Newspaper distribution, wholesale trade in various commodities, and many other activities

can be used to find boundary lines. No two lines will ever coincide completely. There is no such thing as an ideal boundary for a planning region. Whichever one is adopted will be a not wholly adequate compromise with conflicting existing conditions; but the fact of its adoption adds a new condition which makes it more adequate.

The problems dealt with by regional planning may vary widely, but at their core will be generally the use of land and of water and the development of transportation facilities; and these in turn very largely determine the distribution of economic activities.

Two different questions arise in this connection; distribution between regions and distribution within a region. Planning for the former is undertaken mainly by large corporations or by national governments; but distribution within a planning region can be guided by provincial and various levels of municipal governments, dependent on the size of the region.

Perhaps more important than difference in size is the difference between "monocentric" and "poly-centric" regions. Intensive interaction has in most cases developed from an urban centre which has thereby transformed the surrounding area into its own region. In particular in modern industrial society the metropolitan region is becoming the dominant form of human settlement.

However, there are some areas which are characterized by the existence of several centres in close proximity to each other. Probably the most important of these is the Ruhr region in Germany. But in Canada the industrial towns of the Grand River Valley form a comparable constellation, though of course, with a much smaller volume of population and economic activity.

In mono-centric regions much of the drive for regional planning is likely to come from the central city; but in poly-centric regions it will generally have to be initiated by a larger unit. In any case, regional planning requires active participation by non-governmental agencies, because so many of the crucial decisions are actually made by private enterprise. In this connection the German "Landesplanungs-Verbaende" (Regional Planning Associations) are worthy of study. Their membership comprises provincial and municipal governments as well as representatives of the utilities, of industry, agriculture, trade unions, etc.

While active participation of such nongovernmental bodies is essential, it appears that under our Canadian conditions the initiative for defining regions and organizing planning bodies within them must rest with the Provinces. The time is ripe for regional planning. To assist in its development is a challenging task for the Town Planning Institute of Canada and all its members.





## REGIONAL PLANNING AND DEVELOPMENT

LEONARD O. GERTLER  
RESOURCES FOR TOMORROW CONFERENCE  
BACKGROUND PAPERS VOL.I (1961)

Reprinted by permission of  
ROGER DUHAMEL, QUEEN'S PRINTER,  
OTTAWA, CANADA.

The interest in regionalism in Canada arises out of the differences of income and economic opportunity in the broad regions of the country. There is increasing interest, in each region, in achieving greater strength, by developing resource potentials. Experience suggests that policies designed to achieve the effective use of resources require an interaction, both in forming and implementing programs, between three spheres of influence; the national, the broad economic region, and the urban-centered region. There is a need to focus attention on the urban-centered region at this time.

The basic economic trends have created a pronounced shift of population from country to town. The resulting impact on resources of land and water, and the difficulty of maintaining effective community environments have given rise to regional planning.

The three determining elements of regional planning are the character of the planning region, its goals, and its organization. The urban-centered planning region is formed by the geographic concentration of people and by the relationships, involving personal contact, established between a major urban-centre (or a group of functionally complementary centres) and the surrounding country, towns and villages. Goals emerge in the regional planning process, and may be expressed in four main phases: the working out of a strategy for growth, the protection of land, positive planning to achieve optimum resource use and environment, and the creation of regional planning systems within provinces that may integrate with broader programs - such as water control and development and rural redevelopment - in watershed regions and broad economic regions.

There is some form of urban-centered regional planning in most provinces of the country. But greater attention to legislative and administrative arrangements is required if planning is to be effective. Among the principles on which regional planning legislation may be founded are the following: provincial initiative in defining and establishing the boundaries of regional planning authorities; representation on the regional planning authority of both constituent municipalities and relevant provincial departments; preparation and adoption of a regional plan by the regional planning authority; and the creation of a regional planning system, co-ordinated at the provincial level.

From the broad provincial or national viewpoint, the four types of planning region:- urban - centered, watershed, broad economic and frontier - form potentially complementary parts of a general effort to deal effectively with such problems as the conflicting uses of renewable resources, releasing development potentials, and maintaining and creating effective community environments. In particular, attention should be given to the interlocking network of urban-centered regions as a basis for carrying out large-scale regional programs - to develop the resources of a river or reconstruct a broad economic region - while bringing the people of the area actively into the process of evolving necessary programs and carrying them into effect.<sup>46</sup>



In Canada, the persistent interest in regionalism is more than academic. It is rooted in the circumstances described 20 years ago in the Rowell-Sirois report:

"The Canadian economy is made up of a number of diverse and highly specialized areas. Partly as a result of the specialized character of the resources and industries of the individual regions, and partly as a result of national policies, these regions are closely related and integrated and are, to an important extent, dependent on each other. But although these regions may be economically complementary, and the existence of each vital to the welfare of the others, it does not follow that the income resulting from their joint effort is evenly distributed. On the contrary, it is a distinguishing feature of the Canadian economy, which has particular significance for public finance, that a very large proportion of the surplus - and taxable - income of the country is concentrated in a few specially favoured areas."

In the years that followed, the picture has changed in detail but remains the same in substance. Having largely achieved an "average Canadian standard of services," increasing emphasis is being placed on achieving an average Canadian standard of development opportunity, with a view to attaining a more solid basis for the regional sharing of our national wealth. "The time has come," writes Parks, "when we might re-examine our approach to national economic development to determine if we shouldn't, at our present stage of development, orient our concern to the regional as well as to the national aspects of growth."<sup>2</sup> The Cairncross report explicitly calls on the federal government to assume responsibility for regional development in Canada.<sup>3</sup> And, in fact, a move in this direction has already been taken by the recently initiated agricultural rehabilitation and development program designed, by agreements with the provinces, to provide federal, financial and/or technical assistance for resources research, technical training, industrial development, the conversion of marginal agricultural areas to higher economic uses, and recreational projects.<sup>4</sup>

These are broad objectives and broad instruments. Their effectiveness in a large country depends on their translation at the level where the need is felt into specific proposals and specific programs for action. The Senate Committee on Land Use in Canada has recommended that in implementing a federal-provincial rural development program "both provincial and local authorities assume major responsibility for the identification of problems and needs of local areas and the initiation, planning and development of appropriate action programs."<sup>5</sup> Policies designed to achieve the effective use of resources require an interaction, both in evolving programs and carrying them out, between three spheres of influence-the national; the broad economic regions, the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, British Columbia and the Northern Territories; and the smaller regions formed by "humans themselves...through their distribution into areas of concentration, which...because they are the summation of so many factors must be recognized as primary."<sup>6</sup>

This paper will deal with the primary structure of "human settlement" regions because: (1) it is the sphere which, in the author's opinion, is least understood and in which the legislative basis for action requires much attention; (2) it may be the key to the dilemma of pursuing national programs of resource development which are broad in scope and conception and which, as well, are informed by the needs, knowledge and insight of the people of the various economic regions, and are implemented with their assistance and co-operation; (3) within the primary regions the pressure of population makes the renewable resources of land and water peculiarly vulnerable; (4) and it is at this level where the whole purpose of resource development - "the improvement of man's conditions of life" - is worked out in the struggle for a more satisfying environment.

#### Population, Problems and Planning

The people of Canada today tend increasingly to live in and around towns and cities. The distribution of population between urban and rural areas has changed dramatically in the half century following the first national stock-taking of our basic resources when about 60 per cent of Canada's population was rural and 40 per cent urban.<sup>7</sup> Now the proportions are reversed. At the 1956 Census, 66 per cent was urban and 34 per cent rural, and half of these were classed as "rural non-farm," which includes daily commuters from country to town. This has been a steady trend, which includes a bias towards the big centre - about 40 per cent of our population live in 15 metropolitan areas. The Gordon Commission 1980 forecast sees a further intensification of this trend - 80 per cent will be urban and of the remaining population, only nine per cent will be "rural farm."<sup>8</sup>

This national population pattern is a reflection of certain basic trends in the country's economic and social development, such as the intensive and diversified development of resources, the rise of processing industries and manufacturing, the expansion of trade - internal and external - the rise of national industries, the centralization of national offices, the centralization of communications, the demand for improved social services, the increasing importance of governments, and the increased productivity of agriculture. These converging and interrelated forces are built on a structure of modern technology, which, in turn, releases its urbanizing forces - the automobile, the airplane, automation and atomic energy.

The prevailing population trends are deeply rooted and are expressed in the creation of a new kind of community - in part intensively urban, in part suburban, in part rural-urban, and in part entirely rural. This has become Man's characteristic habitat. The skyscraper, the bungalow, the drive-in restaurant or home, the smallholding and the country cottage, the factory and the farm are driven together by the forces of our age into distinct geographic units or regions. We have come to recognize new entities - the Capital Region and Lower Mainland in British Columbia, the Edmonton District in Alberta, the Niagara Region and the Metropolitan Toronto Planning Area in Ontario and so on.

But the very process of intensifying population concentration has created problems which cause the people of Canada increasing concern. There is dissatisfaction with living conditions - "Cities were designed partly so people can live close together and fell sorry for the poor country people who had to drive miles to see one another. Yet when I lived in Toronto my nearest friends were fourteen miles off through traffic lights as thick as jungle creepers. The country isn't as lonely a place as the city."<sup>9</sup> There is worry about the basic forces shaping urban growth - "The environment of our cities, however great the spectacle, becomes more and more dehumanized, depersonalized. The cities and the suburbs more and more seem to show a lack of vision, and unawareness of the lovely, an air of having given up the struggle for the best."<sup>10</sup> There is concern about the effect of population concentration on water - "nowadays we are dealing not with just a

little pollution, but with a vast gigantic amount of pollution in some rivers."<sup>11</sup> on unique recreational areas - "The land conflict normally comes with individuals who wish to develop the most suitable park areas for residential use. For instance it is an astounding fact that virtually no public land is available along the Ontario lakeshore for park purposes between Oshawa and St. Catharines."<sup>12</sup> on agricultural land - "To turn farmland to city land is an almost irrevocable step; looking at this land as a non-renewable resource, how fast are we using it up to make cities?"<sup>13</sup> and on the human spirit - "Is not another symptom of the urban cancer the bewildering increase in those psychological disorders which seem to find fertile ground in the anonymity and solitude of the individual in the unwholesome climate of the big city?"<sup>14</sup> And there is widespread concern with the scattered and chaotic character of development on the urban fringes, that is, with sprawl - "Sprawl..promises" country living "and low costs, but destroys the country and hides the costs. It is unfair to both the farmer and the urbanite. It destroys land and sows innumerable problems for the future. It offers nothing of lasting value that intelligent development cannot offer in infinitely greater measure".<sup>15</sup>

The challenge posed by these problems of environment and resource use has found a response in the rise of regional planning. A concept is crystallizing stimulated by the need for effective action and nourished by a line of thought commenced 60 years ago by the Scottish biologist and planner, Patrick Geddes, who developed the idea of the "city region."<sup>16</sup> While it cannot be said that there is general agreement on a single regional planning concept, there is a need to attempt an integrated statement of the regional approach both to provide a yardstick for measuring present performance, and to indicate its possibilities.

Regional planning is a process, based on law and undertaken by a form of responsible government directed toward influencing development, private or public in a manner that results, in the areas where people settle and establish regional communities, the best environment and the soundest use of resources that our civilization is capable of effecting. Three main elements need to be considered - the planning region; the goals; and the institutions.

#### The Urban-Centered Region - A Basic Planning Unit

The planning region is not, on the one hand, an arbitrary unit created for the convenient administration of a group of functions; nor, on the other hand, is it defined by the location of such natural structural features as a soil belt or a topographic barrier. A wise man has written; "Nature provides the materials...man designs the structure."<sup>17</sup> The significant region is formed by the geographic concentration of people and by those relationships, involving personal contact, established between a major urban centre (or a group of functionally complementary centres) and the surrounding country, towns and villages. It is the relationship established by the city's retail rather than wholesale trade, and by all the other regular face-to-face contacts - recreational, political, social, etc. - that are, because of the personal element, the builders of the regional community. This kind of region has its focus in an urban centre but its limits are not clear-cut. They are approximately determined by the convenient round trip driving time by automobile - about a maximum of two hours or a distance of about fifty miles from the city. Precision in determining boundaries is not to be expected, and the issue of exactly where to draw the line has to be determined by an administrative decision, which, in itself, becomes a factor in the consolidation of the region.<sup>18</sup>

A region thus defined provides an opportunity for society to struggle toward an optimum relationship between community development, resources, and economic development. It is a region in which it is possible to work out a strategy for growth, guided by fun-



damental aims and principles, because within it consideration can be given to all the alternative locations for accommodating an expanding population - in the old city and the suburbs, in the open country in the form of permanent country residences and small-holdings, and in outlying towns and villages, new towns and so on. These features, and the supporting industrial activities, can be related, in their location and over-all impact, to the resources within the region on which the non-farming population depends - the major water supply, natural recreation sites, for both year-round and holiday purposes, the market gardening area, the milkshed; and to any other specialized resource, e.g. gravel for construction, fruits and vegetables for canning, oil and gas for chemical industry, etc., of special significance to the regional economy or the nation.

The stage for regional planning does not have to be devised; it has to be discovered. It is sometimes elusive because it is the product of an evolutionary growth, more or less advanced in various parts of the country. But the main point is that the basic trends of population distribution, and of the underlying economic, social and technological factors, are tending to produce organic regions, in the sense of distinct social entities with interdependent parts connected by transportation and communication systems, and sharing a common life and destiny. This kind of area assumes the character of a regional community which is in itself an important foundation for effective regional planning.<sup>19</sup>

In Canada, two types of urban-centered regions have been identified and in some cases have been used as a framework for regional planning.<sup>20</sup> There is the single-centered region, focused on a major regional city, such as the Capital Region around Victoria; the Lower Mainland Region around Vancouver; and the Planning Districts of Alberta, notably Edmonton, Calgary, Red Deer and Lethbridge. And there are the many-centered regions consisting of a group of centres and their hinterlands of more or less equal size and status, bound together by common interests. Examples of these are the Battle River Planning District in east-central Alberta, or the recently proposed planning region for the depressed area of the East River Valley Nova Scotia, focused on the communities of New Glasgow, Stellarton, Trenton and Westville which share a common economic base of coal mining, shipbuilding and steel.<sup>21</sup>

#### The Regional Planning Process - The Emergence of Goals

The goals of regional planning can best be understood by seeing how they emerge from the regional planning process, as a succession of responses to a succession of challenges. Canadian and American experience makes it possible to identify four main phases. These are not distinct in the sense of being at any time an exclusive concern. They represent the step-by-step evolution of regional planning in practice towards a concept and a program of increasing maturity, effectiveness and social value.

#### Phase One; A Strategy for Growth.

In the first phase, the goals are defensive, related to the threat of breakdown of the community environment - in terms of living conditions, economic efficiency and basic resource requirements; and of the breakdown and hence paralysis of a fragmented local government structure - in terms of its functions, and its area of effective action. The symptoms of this stage are traffic congestion, longer journeys to work, ribbon development along highway approaches, unarrested deterioration of housing in old areas, substandard municipal services in new areas, local and general disorder in land uses, water and air pollution, increasing demands for recreation areas and loss of natural park land, disruption and rising taxes in the agricultural hinterland, increased external costs of industry, increasing per capita costs of government and deteriorating per capita services, intermunicipal bickering and decline in civic morale.<sup>22</sup>

This first stage is closely linked with Metropolitan (or Area) planning because it is a response to impending crisis in the region's centre, and because it may be accompanied by a reorganization of local government on a metropolitan basis. The goals of the regional plan at this stage arise pragmatically from the besetting problems of the area. Stated generally, the aim is to alleviate those aspects of the incipient breakdown that arise out of disorder. The main focus of the regional plan is on a strategy for growth - a strategy for working out the direction, sequence and extent of development within and around the major urban centre of the region. The scope of the plan must be regional because the activities requiring direction and ordering, e.g. highway services, shopping centers, industry, satellite communities, etc., are generated in the city but invade the open country and may decisively influence the key features of urban settlement. Some of the main tools of the plan at this stage are the development schedule, urban renewal measures, subdivision control, and designation of major land uses, including a greenbelt (or encircling agricultural zone), used strategically to define the acceptable limits of urban growth.

#### Phase Two: Protection of Land

The second phase of the regional planning process arises from the attempt to regulate land use within the region. The inescapable measures of the first stage designed to meet near-crisis conditions will, in most regions of Canada, encounter resistance. The reason for this is that the plan is directed toward creating order and certainty in the broad pattern of development. This greatly assists all the stable forces in the community concerned with sound economic development and growth - the home owner, the builder, the investor, and the industrialist in the city; the market gardener, dairy or grain farmer in the country. But the bubble of speculative land sales is pierced. In an atmosphere of uncertainty the land around our cities becomes a happy hunting ground in which everyone believes he has a chance to make a killing. The plan, by saying that development shall go here and there, this year, next year and five years from now, reduces the sphere of speculative possibilities.

But the established urges are strong. Dealing in land, to capitalize on community growth, has become a kind of national sport. Luck at the "casino table" is counted on at the dinner table. An inalienable right to a speculative gain is equated with sacred rights of private property. And the idea that the most profitable use for one owner is the best use for all is made to justify a wide dispersion of urban zoning and development, as if a shift from beef to bungalows were a matter of no greater consequence than a shift from wheat to beef.<sup>23</sup>

Resistance rooted in these circumstances is often very persistent because the stakes are habitually very high - the ratio between floating or speculative value and existing use value may be 30 or 40 to 1. It does not usually take the form of a frontal attack on the plan, but it may be expressed in a gradual process of erosion that thwarts its most basic and primary purposes. And this may be given support from a general reaction, which is simply the resistance to change in an attitude and a mode of economic behavior that goes back, as Thomas Adams has observed, to early pioneer days.<sup>24</sup> The viewpoints of general and special interests merge into a single key question - On what basis does the community, through a regional plan, assume the right to deny any part of the rural, "open", undeveloped area of the region to the demands of the promoter?

This challenge raises for the community embarked on a regional planning program, a most critical task - and that is to create a climate of opinion, a regional morale, that is fully aware of the significance of land. This broad goal arises inescapably from the premises of democratic planning, that is not to impose a plan, but to obtain general consent; given our traditions, this is the only planning approach that is, in the final analysis, workable and effective.

There is no satisfactory answer to the question posed at this stage short of reminding the man in the city of the value of land - not only as space for building, but as a psychological resource for recreation, and as a productive resource for materials and food. Paradoxically, as the city's dependence on ever more land for all purposes increases with its growth, its people become increasingly indifferent to their resource base. "The chain of dependence upon technology lengthens and with it the distance between the individual and the physical basis of survival."<sup>25</sup> It is the particular role of regional planning, as a condition of its success, to overcome the self-defeating attitude of the urbanite towards the land.

The basic, irreducible fact that needs to be communicated is that land is limited.<sup>26</sup> Capital offsets limited resources, including land, only when a technological equivalent is available that maintains production without offsetting costs and without depleting, beyond replacement, the resource to which it is applied.<sup>27</sup> But if the exploitation of resources (use without maintenance), following the dictates of the rate of interest on non-resource investments, is pushed to the point where fertility is destroyed, then technology is wither useless or extremely costly,<sup>28</sup> and the region and the nation will, accordingly, be poorer.

Land as a productive resource is limited. In an urban-centered region it is even more at a premium as a psychological resource; traveling time and costs affect accessibility to wooded areas, rivers, lakes, scenic sites and the surrounding countryside; their value is enhanced in direct relation to their proximity to population concentration. In cities "natural parklands are unique and have no substitute."<sup>29</sup>

In view of the foregoing, the manner in which land is used productively, and the location, quantity and quality of land removed from production or enjoyment by urban development are of consequence to the well-being of the region. It is one of the tasks of regional planning, in response to the traditional attitudes to land, to impart the total view of the relationship between resources and population - informed by the insights of economics, soil science and ecology - for the purpose of creating a general appreciation of the vital issues involved in land use decisions.

In any specific region, the significance of land is revealed through the survey and analysis of resources, which is an essential part of the regional planning program in the second phase. To the notion of land as simply open space for the accommodation of urban activities, it poses the reality of land as a productive resource with all its qualitative variations. The creative possibilities of the analytical survey are demonstrated by Kreuger's study of the Niagara Fruit Belt.<sup>30</sup> By detailed analysis of soil and climatic factors, the study pin points an area of 37,500 acres of land between the foot of the Niagara Escarpment and Lake Ontario where conditions for the growing of tender fruit (and cities) are optimum. The value of agricultural production is considered in relation to the region and the nation; and both directly and indirectly - as a fresh fruit crop and the basis of a processing industry. Some indication of the uniqueness of the agricultural area is given by a consideration of alternative supplies on a continental basis. It is shown that American prices are higher, and their areas of supply, such as South Carolina, are less dependable. And it has been strongly suggested, in another instance, that the other reliable tender fruit area, California, is under heavy pressure from urban growth, with the resultant prospect that two-thirds of the most favorable areas, assuming existing rates of growth and patterns of expansion, will be lost by 1965.<sup>31</sup> There is, in this case, no easy escape from the responsibility for achieving a rational balance between urban and agricultural use at home by dependence on imports from abroad.



A regional resource survey of this type makes it clear that the use of land where town meets country involves a choice, a calculation of gains and losses on a long-term basis, which is of great significance to the economy of the region, the province and the country as a whole. The regional plan plays a role in this kind of choice, because the pricing mechanism fails to take into account the irreversible nature of shifts from rural to urban uses; and does not reflect external economies and diseconomies - the external economies, for example, of agriculture in the Lower Mainland Region of British Columbia where agriculture provides, directly or indirectly 25 per cent of the jobs in the region,<sup>32</sup> and the external diseconomies of urbanization when it takes the form of sprawl, areas of scattered, low density development which, in terms of municipal finance, are deficit areas.<sup>33</sup>

In these circumstances, the regional plan is an indispensable supplement to the market place. It plays its role, in the second phase, by holding firmly, in principle, to the strategic plan of the first phase, by deepening the public awareness of the significance of land, by taking stock of regional resources, and by adding an additional policy goal to its defensive repertoire, namely the protection in the public interest of the best agricultural land from urban encroachment, unless an overriding need can be demonstrated.<sup>34</sup>

### Phase Three: Towards Optimum Resource Use and Environment

Regional planning in its second phase contains the seeds of its own contradiction - unless it goes further. Being mainly defensive and protective, it invites the effective challenge of business and industry - which are dynamic and aggressive, the source of economic growth and municipal revenues, and which have strong bargaining power in the land market. To meet this challenge the regional plan in the third phase has to move from defensive to positive goals. It has to demonstrate how the full economic potential of the region can be realized, without wasting productive farm land, and without incurring the private and social diseconomies of an inefficient, and ugly or uninspiring community environment. Thus the planning process moves from an emphasis on overcoming the waste and misuse of resources to providing a guide for the optimum use and development of the region's resources and locational advantages; and from a preoccupation with halting and deterioration of environment to the creation of the best possible physical setting for the community's life.

The character of our age makes these goals as difficult as they are compelling. We are confronted by powerful paradoxes. The North American genius for efficiency in the plant is paralleled by rampant disorder outside the plant. Thoreau was right; "We do not ride the railroad, the railroad rides on us". While we struggle tragically with the means of our civilization, we seem to lose sight of the ends. All the initial promise of our cities as cosmopolitan places for living richly, seems to fade as our technological powers increase; The modern proverb - 'Man cannot live by sewers alone' - is more than a jest.

In this world out of joint the regional planner seeks solid anchorage in the scientific study of the relationship of living things to their environment of habitat. "Regional planning", write Mumford and MacKaye, "deals with the ecology of the human community". Ecology yields insights too relevant to be ignored. One is that any species survives as part of a system of essential conditions - of topography, soil, climate, fauna, flora - and flourishes to the extent that the components of the system approach and sustain a state of equilibrium. Another is Blackman's law of limiting factors;

physiological processes are limited by the least favorable factor in the system of essential conditions.<sup>35</sup>

The most important practical application of these insights is found in the discovery within planning regions - the urban - centered regions which are becoming home for more and more people - the combination and balance of conditions essential for both optimum economic development and optimum environment. "Planning is fundamentally revelation." In this sense, regional planning is much more than just that type of planning applied to an area bigger than an urban unit. Its content as well as its form are rooted in the region. For the economic goal is approached by developing the possibilities inherent in the unique climate, resources, location, labor force, and technological and capital facilities of the region. And the environmental goal is approached by developing the possibilities inherent in the unique landscape, traditions and culture, as well as location and climate, of the region.

The way in which these broad goals are interpreted depends, of course, on the character of the region. In areas of dynamic growth, such as most of our 15 metropolitan areas, the need is to know intimately the region's problems and potentials, industry by industry as a basis for anticipating growth and for guiding, with intelligence, the location of employment-creating, population-generating activities; and it is necessary to devise development standards and broad patterns of growth that create a mold of high quality into which numerous separate developments would fit. By contrast, in areas where economic development is lagging, lop-sided or about-to-be-initiated, such as Pictou County, Peace River or Pine Point, the task of the regional plan is to visualize the economic complexes that could materialize as well as the variety of instruments, public and private, for stimulating a healthy, well-balanced economic growth; and it is necessary, in these circumstances, to give expression to the physical communities, in terms of broad settlement pattern and three-dimensional design, that could be supported by and which would serve the projected economic complexes. In practice, the variety of problems faced in any area and the conditions accompanying development-for example, whether it is fragmentary or comprehensive - will require some combination of these approaches.

Whatever the variants in policy may be, the regional planning program, in the third phase, will be effective to the extent that it follows certain principles, suggested by the insights of ecology. It will need to be grounded in a deep knowledge of the region, so that potentials may be released. It will need to recognize the principle of limiting factors, in the sense of indentifying and coping with the vulnerable elements of the complex of conditions underlying the well-being of the region's life - as, for example, the people of the Vancouver region have recognized in their concern for the protection of limited arable land; the people of the Edmonton region in their concern for the efficient use of a limited and highly concentrated water supply; and as the people of Sarnia have, in their concern for controlling the pollution hazard from petrochemicals.<sup>36</sup>

Striving for balance or equilibrium, or more accurately a moving equilibrium in response to growth and change, will be important in many ways - for example, in realizing the region's potential for economic diversity, that is, for a balance between primary, secondary and service industries; and, in achieving a balance between land uses, between housing and industry, and between urban and rural uses. But most important is the striving for a harmonious correlation of economic processes and community development, and, as a corollary, of the goals of optimum resource use and optimum environment.

Economic development and physical planning need to go hand-in-hand. It has been pointed out that an appropriate allocation of capital, achieved by the market mechanism or government or a little of both, does not automatically produce an appropriate allocation of land.

And physical development plans created in a vacuum without relation - in conception or effects - to investment, output, employment and income may cause serious economic dislocation.<sup>37</sup> The regional plan has a strategic role to play in linking these elements. There are two correlations of importance here - between environment and economy, and environment and function. The first is achieved by appropriate organization that co-ordinates physical and economic goals. The required systematic framework is found in a regional capital budget that relates needs to financial capacity and effects, and behind that, to an understanding of the regional economy through some variant of an economic base study.<sup>38</sup>

The second correlation rests, in part, on the observation that "there is an intrinsic conformity of esthetic and functional qualities of an environment...To be precise, not all functions create environmental beauty, nor is all environmental beauty functional; but quality creates conformity between them".<sup>39</sup> Reforestation, contour-plowed land, the field patterns of crop rotation, shelter belts, dams, falls, reservoir lakes, power plants, the shapes of well-designed industry, whether the spheres of a chemical plant or the strong diagonals of a sugar refinery, the penetration of wedges of the countryside into new areas of urban growth, and the definition of cities by greenbelts - these are some of the things that show the link between sound function and sound environment. In this inheres an opportunity that the regional plan can build on, through suitable organization, and the striving for a synthesis of all the constructive elements of the region.<sup>40</sup> This striving, it is important to note, is "not an effort to make a region self-subsistent; it is an attempt to bring it into the highest state of economic and human cultivation".<sup>41</sup>

#### Phase Four: Integration with Broader Levels of Planning

The same forces of industrialization and urbanization that create the urban-centered region, create in a mature, industrial country a network of urban-centered regions. The region gains its internal cohesion by virtue of "a unique cluster of interrelated conditions, traits or forces," and its external definition by virtue of an "intercommunity division of labor".<sup>42</sup> The goals of regional planning cannot, therefore, be considered outside this context. The larger, interregional framework is essential both to get economic limits and to condition goals. What might appear as the flowering of the "good life" from inside the region may, from the outside, look like metropolitan aggression and exploitation. The challenge of the fourth phase is to overcome the strictly self-centered regional concept, and its goal is to establish, through a system of regional planning, a larger-provincial or national-order of sound resource use and optimum environment.

The fourth phase of the regional planning process rests on the emerging interregional structure. It has been authoritatively stated for the United States that "in the not too distant future the number of metropolitan centers may increase to such an extent that 65 miles will be the maximum distance which most areas lie from a central city, and technological improvements in transportation may permit all communities within this radius to participate directly with the metropolis".<sup>43</sup> In Canada, the population forecasts of the Royal Commission on Economic Prospects suggest that similar tendencies are strongly in evidence. There is already an almost continuous network of urban-centered planning regions extending along the entire Province of Alberta; in Saskatchewan, the Royal Commission on Agricultural and Rural Life proposed a provincial system of rural-urban regions based on the trading area concept; and proposals for a system of regional planning in Ontario are legion.<sup>44</sup>



About eight years ago, a system of economic zoning of Canada was attempted in the Department of Defence Production "to assist in determining the impact of defence procurement and strategic resources development on different parts of the country." This pioneering work used in its definition of regions both structural factors - "the basic location of natural resources.....as modified by the actual distribution of human and capital resources required for economic activity", and functional factors - "the activities or functions performed by the area" and focused on centres, of five orders, with labor forces ranging from under 10,000 to over 75,000. In this way an urban-centered concept very similar to the "planning region" concept of this paper is worked into the delineation nationally of some 60 zones, and 235 subzones.<sup>45</sup>

To the extent that the urban-centered region is, in fact, becoming one of a network, it assumes greater significance in a much broader endeavor, with provincial or even national dimensions. But in a country of continental scale like Canada, the regional framework from the point of view of both understanding problems and dealing with them effectively, is not completed even by "the interlinked pattern of city regions."

Three other types of region need to be recognized: river valley regions, broad economic regions, and frontier regions. The postulated goals of resource use and environment cannot be achieved, provincially, or nationally, unless the relevance of these distinct frameworks is recognized. The watershed region forms the natural planning unit to deal with problems and opportunities of water control and development. Frontier regions pose the special planning problems of determining potentials for diversified economic development; building communities rapidly and comprehensively, and finding the large capital sums required; and meeting the challenge of logistics, both of materials and technique. In the broad economic regions, the planning problems are those that arise from the peculiarities of the physical environment, such as drought and soil drifting in dry, grassland areas of Western Canada; and those arising from the position of the region in relation to materials, markets and the national transportation system and its cost structure, such as the problem of "under-development" in the Atlantic Provinces.

From the broad provincial or national viewpoint, the four types of planning region - urban-centered, watershed, broad economic and frontier - form potentially complementary parts of a general effort to deal effectively with such problems as the conflicting uses of renewable resources, releasing development potentials, and maintaining and creating effective community environments. From the viewpoint of the economy, efficiency and intelligibility of government, the relationship between the different types of planning unit needs to be considered. In particular, attention should be given to the interlocking network of urban-centered regions as a basis for carrying out large-scale regional programs - to develop the resources of a river or reconstruct a broad economic region - while bringing the people of the area actively into the process of evolving necessary programs and carrying them into effect.<sup>46</sup> This view has recently been given forceful support out of the experience of New York State. "We are living through the growing pains of a new planning concept thrust upon us by this wave of urbanism. Only if watershed planning is integrated with city region planning, with metropolitan planning a fundamental part, will it make sense and continue to make sense".<sup>47</sup>

The above perspective is relevant to the relationship between the urban-centered region and the broad economic region. This is particularly evident in the carrying out of a large-scale program of rural redevelopment, of the kind recently presented to the House of Commons, which is conceived as a "co-operative enterprise of government, groups and individuals." The more fully developed the regional

planning structure and process within the provinces, the more effectively can they participate in the broader program. For, as has been shown in the discussion of goals, the questions: what do we have? what are our needs? what are the potentials of the region? and how can we realize them? are inherent in planning for the interconnected network of urban-centered regions. In a sense, it is the foundation on which the whole edifice stands.

## Organization for Regional Planning - Theory and Practice

The institutions required for effective urban-centered regional planning arise out of the character of planning regions and of the goals of regional planning. The specific features of these institutions will be the composite product of provincial legislation and regulations, and of the policies and spirit of participating provincial and municipal governments. There are nine essential points:

1. To be certain that administrative boundaries approximate urban-centered regions, there needs to be authority at the provincial level to define and establish the boundaries of regional planning authorities.
2. Because such areas will embrace at least one city and a number of towns, villages and rural municipalities, the governing council (board or commission) will have to be based on a principle of representation that will be considered equitable by the constituent municipalities.
3. Because they are areas in which the activities of provincial governments are important in such fields as public works, highways, agriculture and municipal affairs - representation of relevant provincial departments will be highly desirable for the purpose of co-ordinating provincial-municipal effort at the regional level.
4. To perform effectively, the regional planning organization needs the authority to control the subdivision of land; and to prepare and to implement a comprehensive regional plan (a) governing the inherently regional aspects of land use - in particular, the general urban zone, the agricultural districts that define urban limits, the generators of urban growth such as major industry and highway development, regional parks, and the location of new urban areas in the region, (b) establishing the stages and sequence of development, and (c) programming - in terms of standards, location and time schedule - capital works of acknowledged regional significance.
5. To meet the threat of breakdown in environment and government due to chaotic and unregulated growth, the regional organization needs to have authority to prepare and implement a preliminary regional plan that guides growth until the comprehensive regional plan is completed.
6. To face up to the land question: the need to establish the practical basis for the control of its use in the public interest, the regional authority should be free to carry on a program of public education.
7. To attain the positive goals of regional development - the realization of the full economic potential of the region while attaining all its possibilities for an inspiring physical environment - requires (a) that the regional planning authority have at its disposal a number of positive instruments for influencing the pattern of regional growth, such as new towns legislation,<sup>48</sup> and (b) that the government statute have a built-in flexibility, allowing for the province and the constituent municipalities to assign new functions to the regional authority in response to new needs and changing aspirations, such as the need for the joint financing of a capital project of regional significance, e.g. a major parks development, or the desire for capital budgeting on a regional basis.
8. To place regional growth in a broader framework of provincial



policies and objectives, to realize the community and resource planning role of the region as a unit in a network of interrelated regions - the co-ordination of municipal interests at the regional level will need to be complemented by the co-ordination of regional interests at the provincial level.

9. In addition, experience suggests that no planning will be effective without a staff of qualified planners, and that there is a probability that adequate staffs will not be provided by regional planning authorities unless costs are shared by the provinces on a regular, formula basis.

In short, the kind of institution required for effective regional planning is one that recognizes the urban-centered region as a proper sphere of action, - the stage on which common municipal interests meet, - and which equips the people of the region to plan effectively for themselves, through decisions democratically determined, while being assured that they are not at cross-purposes with provincial policies and works, and are planning with an appreciation of, and in response to, province-wide as well as regional trends and needs.

While the effective forms of regional planning institutions can be demonstrated out of Canadian experience, generally speaking regional planning in this country is not well established. Detailed comment on the various legal and administrative forms would not be profitable. From the study of provincial legislation and the few appraisals available, and from correspondence and discussions with planners in every province; the main features emerge quite clearly. These are (1) that the planning function covers the urban-centered region in only a few areas of the country - the Lower Mainland Region of British Columbia and the Planning Districts of Alberta; (2) that in all provinces, with the exception of Alberta and Newfoundland and, in a qualified way, Manitoba and Quebec, the regional planning bodies that can be established are advisory - plans solemnly passed by boards can be unceremoniously rejected by municipalities; and (3) that, in most areas, provincial financial support for joint or regional planning agencies, while often substantial, is not provided on a regular basis.<sup>49</sup> In the light of the nature of planning regions, of the far-reaching and difficult-to-achieve goals of regional planning and of the institutional requirements, it is not surprising that in most parts of the country performance falls far short of the challenge.

In making this judgment, the writer is mindful of the observation at the 1958 annual meeting of the Town Planning Institute of Canada, to the effect that every provincial planning system has its own history and its own inner logic. And from this point of departure it needs to be said that the inner logic of a system that produces regional or joint planning boards with neither the authority to dispose of the matters that are its unique concern nor, because of financial strictures, with staffs qualified to do a competent job, leads not to joint planning but to joint frustration - accompanied by public disrespect and demoralization. This is not to lose sight of the importance of the advisory form as a step in the evolution of regional planning; and as a continuing feature in the form of technical advice on local matters. There is room for criticism only when the advisory form of regional planning is considered a terminus.

Surveying the national picture very broadly, however, leaves no room for pessimism. In almost every province there are statutes, policies and programs that suggest much creative potential and promise. In British Columbia, we have examples in the Capital Region and Lower Mainland of solid research and imaginative planning proposals. In Alberta, we have at least the framework of a soundly conceived and effective regional planning system. In Saskatchewan, there is the work of the South Saskatchewan River Development Commission, a provincially-

initiated, resource-based planning agency designed to co-ordinate the irrigation, power, flood control, recreation and water supply aspects of the South Saskatchewan River Project, which is, in itself, the product of co-operation between a province and a regional federal organization, the Prairie Farm Rehabilitation Administration. In Manitoba, there is the edifying evolution of local government and planning in the Winnipeg area to a new metropolitan form; the establishment of the Manitoba Development Authority to co-ordinate natural resource development and stimulate the general economic development of the province; and the recent move to establish Watershed Conservation Districts. In Ontario, there is the attempt to implement a metropolitan plan for the Toronto area; the work of the 30 Conservation Authorities in flood control, reforestation, and recreation; and the comprehensive regional studies of the Community Planning Branch. In Quebec, the whole field of regional planning in its economic and physical aspects is now under review. In New Brunswick, there is the redevelopment program of Saint John involving the three levels of government. In Nova Scotia, the Maritime Marshland Rehabilitation Administration, which has reclaimed or protected about 80,000 acres in 10 years, is an interesting case of federal-provincial co-operation to solve a regional problem. In Prince Edward Island, there is the Rural Beautification movement and an increased interest in community planning and sound resource development, as indicated by the recent appointment of a provincial planning officer, and a director of research. And in Newfoundland, there is potentially effective regional planning legislation, still largely unused, and the beginnings of a comprehensive systematic approach to social, economic and physical aspects of development regions.

This severely selective outline serves to indicate that the national scene is anything but inactive in the field of regional organization for conservation, resource development and community planning. But when it is all added up, there remains the overwhelming impression that all this ingenuity and vigour lacks a focus, particularly where the need is greatest, on the tough and unrelenting problems that arise out of the unprecedented and apparently irresistible concentration of our people into urban-centered regions.

#### The Timeliness of Regional Planning

Canada today is at a stage in its development where, generally speaking, its institutions of government have not responded to the basic population trends that are producing a pattern of urban-centered regions. The resulting inability to cope with the problems that are thrown up is a source of increasing anxiety. "We are concerned", writes a group of distinguished architects, "with the default in regional planning as a threat to the quality of the residential environment".<sup>50</sup>

The "default of regional planning" affects our living environment in ways that are familiar; and the use of renewable resources, in ways that are not always obvious. Crerar of the Lower Mainland has recently presented evidence showing that for each acre consumed by our cities for purposes of development, 2.5 acres are wasted - that is, held out of production for speculative purposes, or for very low density development.<sup>51</sup> Further, careful survey and analysis is required to establish the extent and magnitude of the direct and indirect effects of urban growth on land. The empirical evidence does confirm what we know about the land market. "Where a five year supply is in the hands of builders, a further supply for 10 or even 20 years after that may be held for sale to builders".<sup>52</sup> This conforms to a pattern, characteristic of North America, described "as a virtual scorched-earth policy for many lands around our cities".<sup>53</sup>

Our propensity to waste land, viewed with historical perspective, is not to be taken lightly. Mumford has noted the shift of the western world in the last century from an essentially rural base "to a metropolitan base whose urban spread not merely has engulfed and assimilated the small units...but is fast absorbing the rural hinterland and threatening to wipe out many natural elements favorable to life which in earlier stages balanced off against depletions in the urban environment". Dale and Carter even more ominously relate the rise and fall of civilizations to the use and misuse of land.<sup>54</sup>

The resources-population issue, which increasingly has its geographical focus in a network of urban-centered regions, is put comprehensively and neatly by the ecologist, Sears, in his formula  $(R/P) F(C)$ , denoting that the level of living of any group is determined by the interrelation (F) between Resources (R), Population (P) and Culture (C).<sup>55</sup> Cultural factors include technology, trade, institutional inheritance and administrative techniques. Some factors operate to increase the available per capita share of resources; some to decrease it; and other may operate in both directions - "technology has two faces." The over-all directions of our culture in this issue is by no means clear. The evidence suggests on the one hand (a) that we are still attempting to meet the new conditions and problems produced by our economic and population growth and the rise of urban-centered regions in terms of the administrative techniques of the past, and to that extent are tolerating the waste and abuse of our resources and, on the other hand, (b) that we are moving toward the use of a new technique which, because of its focus on the urban-centered region, its positive goals in relation to environment and resources, and its articulation with levels of government above and below - is a promising device for making the most of what we have.

## REFERENCES

- <sup>1</sup> Royal Commission on Dominion Provincial Relations, Book II. Recommendations. Ottawa. 1940. p. 75.
- <sup>2</sup> A.C. Parks. "The Atlantic Provinces as a Region", a paper prepared for the 1961 Resources for Tomorrow Conference.
- <sup>3</sup> The Financial Post. March 4, 1961
- <sup>4</sup> House of Commons Debates, Ottawa. January 25, 1961 pp. 1403-1407.
- <sup>5</sup> Ibid. p. 1404
- <sup>6</sup> Nicholson, L.H. and Z.W. Sametz, "Regions of Canada and The Regional Concept, a paper prepared for the 1961 Resources for Tomorrow Conference.
- <sup>7</sup> Adams, Thomas, Rural Planning and Development, Commission of Conservation Canada. Ottawa. 1917. p. 21

- <sup>8</sup> Dube Y., J.E. Howes and D.L. McQueen, Housing and Social Capital. Royal Commission on Canada's Economic Prospects. Ottawa. 1957. p. 32
- <sup>9</sup> Ewing, John, "I've Quit The City For Keeps", McLean's Magazine. September 15, 1951. p. 55
- <sup>10</sup> Bates, Stewart, "The Need For An Ideal", Community Planning Review. December 1955. p. 126.
- <sup>11</sup> op. cit.-Dube, Y., J.E. Howes, D.L. McQueen, Quotation from speech of D.J. Prevost, professor of biology, University of Montreal. p. 137
- <sup>12</sup> The Conservation Council of Ontario, A Report on Land Use. Toronto. 1960. p. 24
- <sup>13</sup> Royal Architectural Institute of Canada, Design of The Residential Environment. Ottawa. 1960. Paragraph 54.
- <sup>14</sup> Cimon, Jean, "Le Cancer Urbain", Community Planning Review. March 1957. p. 50.
- <sup>15</sup> Lower Mainland Regional Planning Board, Urban Sprawl, New Westminster, B.C. 1956. p. 15.
- <sup>16</sup> Geddes, Patrick, Cities in Evolution. Williams and Norgate Ltd. London. 1949.
- <sup>17</sup> Mumford, Lewis, The Culture of Cities. Harcourt Brace and Company. New York. 1938.
- <sup>18</sup> Blumenfeld, Hans, "Regional Planning", Plan. June 1960 p. 122-124.  
Gertler, L.O. "District Planning In Alberta", in Record of Papers, 1956 Conference, Town Planning Institute of Canada. Banff, Alberta.  
Friedmann, John R.P., "The Concept of a Planning Region", Land Economics, February 1956.
- <sup>19</sup> Community is understood here as something containing both structural and functional elements, as these are defined by E.C. Lindeman:  
"A community, if we define its explicit elements, is any consciously organized aggregation of individuals residing in a specified area of locality, endowed with limited political autonomy, supporting such primary institutions as schools and churches and among whom certain degrees of interdependency are recognised. This definition will include hamlets, villages, towns and cities.  
A community, if we define its implicit elements, is any process of social interaction which gives rise to a more intensive or more extensive attitude and practise of interdependence, cooperation, collaboration and



unification". Encyclopedia of the Social Sciences. The MacMillan Co. New York. 1950.

- <sup>20</sup> This paper accepts the distinction made by Mumford and MacKaye between regional and metropolitan planning in their article on "Regional Planning" in the Encyclopedia Britannica. They write:

"Regional Planning, a term used...to describe a comprehensive ordering of the natural resources of a community, its material equipment and its population for the purpose of laying a sound physical basis for the "good life". In America the term has also been used to describe plans for city extension over wide metropolitan areas; this type of planning should properly be called metropolitan planning. Regional planning involves the development of cities and countrysides, of industries and natural resources, as part of a regional whole".

From this viewpoint the recently established system of Area planning in Winnipeg, Toronto and Montreal is metropolitan planning.

- <sup>21</sup> Fitzner, Stanley, "New City May be Only 25 Years Away", The Globe and Mail. December 24, 1960. p. 7.

The possibility of regional planning board in this area was confirmed in a letter to the author by Mr. D J. Bird, Director of Community Planning, Department of Municipal Affairs, Nova Scotia.

- <sup>22</sup> Gertler, Leonard, "Why Control The Growth of Cities", Community Planning Review. December 1955. pp. 151-155.

- <sup>23</sup> The working principle has been described, incredibly as follows:

"If this particular acre would yield a net return of 6 dollars when it is devoted to the production of beef, it should be grazed, rather than planted to wheat (which yields 5 dollars per acre)...The same forces operate when highly productive dairy farms in New York are sold to builder because the economic productivity of the land as building lot is higher than when it is producing butter, milk, and cream".

Chryst, Walter E., and William C. Pendleton Jr. "Land and the Growth of the Nation", in Land, The Year-book of Agriculture, 1958. Washington, D.C. p. 4.

- <sup>24</sup> "In a new country a certain amount of speculation is inevitable, and it is not an unmixed evil. It draws out and stimulates energy and enterprise that might otherwise lie dormant..But, when the pioneer stage is over and the building up of the social life of a new community begins, speculation takes on new and injurious forms. Op. cit. - Adams. p. 102.

- <sup>25</sup> Sears, Paul B., The Ecology of Man. Oregon State System of Higher Education, Eugene, Oregon. 1957. p. 35



<sup>26</sup> The definition of land here assumed is the following:  
"Land (in its economic sense) includes those durable-use producers' goods which are given by nature; Fixed Capital includes those which are made by man. More strictly, Fixed Capital consists of kinds of durable use equipment whose supply can readily be increased, if we so desire, by the production of new units. Land consists of those kinds which are inherited from the past, and whose supply cannot be readily increased if we want more of them."

Hicks, J.R. and Albert Gailord Hart, *The Social Framework of The American Economy*. Oxford University Press, New York. 1945. p. 100.

Land, so defined includes both renewable resources, such as minerals. The discussion at the point is related to the renewable aspects of land.

<sup>27</sup> This point, and its relationship to conservation, has been clearly stated by G. K. Goundry, as follows: "The real conflict between economists and conservationists is that the former have (blind?) faith in science and technology whereas the latter want to ensure that if our confidence should prove to be misplaced we have not irrevocably committed ourselves to decline and poverty".

Goundry, G.K. "Economics and Conservation", *The Canadian Journal of Economics and Political Science*. May 1960. p. 324.

<sup>28</sup> The relationship between the rate of interest and the degree of conservation has been stated, as follows:  
"The total amount of conservation in an economy... depends upon the expectations of future prospects of the owners of resources, and the rate of interest which in the long run measures the expectations of investors in other fields relative to the funds available.

If resources in a region are being conserved, we would expect to find the rate of interest is low and that investment opportunities elsewhere are poor. But if they are not being served, either interest is high...or else investors find much better uses for savings than reembodying them in natural resources. The important thing here is that natural resources are the capital of a region, just as man-made equipment is; and conservation is investment, just as augmenting the supply of machines is investment".

Scott, Anthony, "Conservation Policy and Capital Theory", *Canadian Journal of Economic and Political Science*. November 1954. pa 506. What happens to the resource if the high rate of interest persists?

<sup>29</sup> City of Toronto Planning Board. *Natural Parklands*. Toronto. 1960. p. 1.

<sup>30</sup> Kreuger, Ralph R. "Changing Land-Use Patterns In The Niagara Fruit Belt", *Transactions of The Royal Canadian Institute*, Part II. October 1959.

<sup>31</sup> Gregor, Howard F., "Urban Pressures on California Land" A Rejoinder, *Land Economics* February 1958 p. 84.

- <sup>32</sup> Wilson, J.W., in A Brief to the Metropolitan Joint Committee, Lower Mainland Regional Planning Board of B.C. February 1960. p. 2.
- <sup>33</sup> Lower Mainland Regional Planning Board of B.C. Economic Aspects of Urban Sprawl. New Westminster, B.C. May 1956. p. 17,
- <sup>34</sup> This objective was expressed within the Edmonton Planning District, in the General Plan for the Municipal District of Stony Plain, as follows:  
"Critically evaluate applications for non-agricultural development in the municipality in relation to the Soil Rating map, for the purpose of discovering, before granting approval, whether the requirements of proposed developments can be met on land of lower productivity",  
Edmonton District Planning Commission, A General Plan. The Municipal District of Stony Plain. Edmonton. 1956. p. 38.
- <sup>35</sup> Of major interest here are the following: op.cit.-Encyclopedia Britannica. p. 72 A.  
Sears, P.B. Life and Environment. Teachers College, Columbia University, N.Y., 1939. Note in particular theory of limiting factors, p. 105; and discussion of the social function of ecology. pp. 134-147.  
Sears, Paul B. "The Process of Environmental Change by Man", Man's Role in Changing the Face of the Earth. University of Chicago Press, Chicago 1956, pp. 471-484.
- <sup>36</sup> The concern for land in the Vancouver region is indicated in the following:  
Lower Mainland Regional Planning Board, Urban Sprawl, New Westminster, B.C. 1956. And the concern for water in the Edmonton region in the recent report:  
Edmonton District Planning Commission, The Edmonton District Water Supply. Edmonton. 1960.
- <sup>37</sup> See, Haar, Charles, Benjamin Higgins, Lloyd Rodwin, "Economic and Physical Planning: Coordination in Developing Areas", in Journal of The American Institute of Planners. Vol XXIV, No. 3. 1958.
- <sup>38</sup> For an outline of this type of co-ordinating program at national and regional levels see, *ibid.* - pp. 172-174.  
  
See for a concise statement of the role of capital budgeting in planning, Handler, A. Benjamin, "The Fundamental Aims of Planning", in Plan, Canada. Vol. 1, No. 1. 1959. For an example of an economic base study, see - Edmonton District Planning Commission, An Economic Base Survey for the Edmonton Metropolitan Area. Edmonton. 1958.
- <sup>39</sup> Glikson, Arthur, "Recreational Land Use", in Man's Role in Changing The Face of the Earth, Chicago University Press, Chicago. 1956. p. 906.

- <sup>40</sup> The concept of regional planning as a synthesis of all positive elements is fully elaborated in Benton MacKaye: *The New Exploration*, Harcourt, Brace and Co., N.Y. 1928. See in particular, Chapters, 9, 10, 11 and 13.
- <sup>41</sup> Op.cit. -Mumford and MacKaye, p. 72A.
- <sup>42</sup> Bogue, Donald J., "Population Distribution", *The Study of Population*, edited by Philip M. Hauser and Otis Dudley Duncan. University of Chicago Press. 1959. p. 396.
- <sup>43</sup> Bogue, Donald J., *The Structure of the Metropolitan Community* - quoted by op. cit. - Friedmann, John R.P., "The Concept of a Planning Region". p. 12.
- <sup>44</sup> For outline of Alberta system, see *Resources for Tomorrow* paper by F. Marlyn and H.N. Lash.  
The Saskatchewan concept is described by Kinzel, John F., "Planning for People - A Concept of Rural-Urban Regions", *Community Planning Review*. September 1957.  
One of the latest proposals for regional planning in Ontario, from Oshawa to Niagara Falls, was made by, Pearson, Norman, "Regional Planning", Plan. November 1960.
- <sup>45</sup> Economic and Statistics Branch, Department of Defence Production, *Economic Zoning of Canada and D.D.P. Geographic Code*. Ottawa. 1953. p. 9, p. 28, and pp. 46-59.  
For refinement of this system, see *Regions of Canada and the Regional Concept*, a paper prepared by Nicholson, N.L. and Z.E. Sametz, for the 1961 *Resources for Tomorrow* Conference.
- <sup>46</sup> This point is emphasized by Friedmann, links it with the commanding position of cities, as centres of power, as follows:-  
"...The United States economy maintains a definite spatial structure expressed in the pattern formed by City regions, and functional planning will usually be carried out successfully where it is closely related to this pattern, point for point. City regions are the nerve centres of economic life in an area. They are the seats of economic power where most of the population is concentrated, where most of the vital decisions affecting larger areas are made, and where the financial means are present for carrying these decisions into action. Any planning which ignores this primary fact about the spatial structure of an economy must be judged unrealistic". Op. cit. - Friedmann, John R.P. p. 13.
- <sup>47</sup> Hanlon, Eleanor E., "Metropolitan America", *Resources*. February 1961.
- <sup>48</sup> See, *New Towns Act*, Alberta, for an example of how technical and financial aid may be used for the positive encouragement of economic development and a desirable pattern of settlement.  
Abrams, moving from the assumption that "the primary influence in regional development is industrial settlement", emphasizes the combination of devices necessary to achieve the fulfilment of regional planning goals, under the headings of

"persuasion, inducement, compulsion, direct operations, public-private joint ventures and planned inevitability". His remarks are ostensibly in relation to underdeveloped areas but apply generally, with differences in degree, depending on the amount of drive in the private sector of the economy.

Abrams, Charles, "Regional Planning Legislation in Underdeveloped Areas", Land Economics. May 1959.

- <sup>49</sup> This financial assistance is supplemented by technical help of a high calibre from provincial planning offices in the Provinces of British Columbia, Alberta, Saskatchewan Manitoba, Ontario, Quebec, Nova Scotia, Prince Edward Island and Newfoundland. Under the assumptions of this paper, the ultimate role of a provincial planning office is one of co-ordination of regional planning programs directed towards the goals of optimum environment and resource development for the province; and the undertaking of basic research - in the field of resource development, economics, sociology and community planning - which will assist both the province and the constituent regions to achieve their goals. Provincial planning offices in Canada are, generally speaking, not at this stage.
- <sup>50</sup> Royal Architectural Institute of Canada. Design of The Residential Environment, Paragraph 127.
- <sup>51</sup> Crerar, A.D., The Loss of Farmland in the Growth of The Metropolitan Regions of Canada. Unpublished submission on behalf of The Community Planning Association of Canada - B.C. Division, to Resources for Tomorrow Conference, New Westminster, B.C., 1960. pp. 14-15.
- <sup>52</sup> Royal Architectural Institute of Canada. Design of The Residential Environment, Paragraph 48.
- <sup>53</sup> Gaffney, M. Mason, "Urban Expansion - Will it Ever Stop?" in Land. The Yearbook of Agriculture, 1958. Washington, D.C. p. 511
- <sup>54</sup> Mumford, Lewis, "The Natural History of Urbanization", in Man's Role in Changing the Face of the Earth, University of Chicago Press, Chicago. 1956. p. 395.  
Dale, Tom and Vernon Gill Carter, Topsoil and Civilization, University of Oklahoma Press, Norman, Oklahoma. 1955.
- <sup>55</sup> Sears, Paul B., The Ecology of Man. p. 40.

#### BIBLIOGRAPHY

Abrams, Charles, "Regional Planning Legislation in Underdeveloped Areas", Land Economics. May 1959.

Adams, Thomas, Rural Planning and Development, Commission of Conservation, Canada. Ottawa. 1917.

Blumenfeld, Hans, "Regional Planning", Plan. June 1960.

Conservation Council of Ontario, A Report on Land Use. Toronto. 1960.

Crerar, A.D., The Loss of Farmland in the Growth of the Metropolitan Regions of Canada. Community Planning Association of Canada (for Resources for Tomorrow Conference). New Westminster, B.C. 1960.

Dale, Tom and Carter, Vernon Gill, Topsoil and Civilization; University of Oklahoma Press. Norman, Oklahoma. 1955.

Dube, Y., and Hawes, J.E. and McQueen, D.L. Housing and Social Capital. Royal Commission on Canada's Economic Prospects. Ottawa. 1957.

MacKaye, Benton, The New Exploration, Harcourt, Brace and Co. New York. 1928.

Mumford, Lewis, The Culture of Cities. Harcourt, Brace and Co. New York. 1938.

Scott, Anthony, Natural Resources: The Economics of Conservation, Canadian Studies in Economics. Toronto. 1955.

"Conservation Policy and Capital Theory", Canadian Journal of Economic and Political Science. November 1959.

Sears, Paul B., The Ecology of Man. Oregon State. System of Higher Education. Eugene. Oregon. 1957.

Sears, Paul B., Life and Environment. Teachers College, Columbia University. New York. 1939.

Wenner Gren Foundation, Man's Role in Changing The Face of the Earth. University of Chicago Press. Chicago. 1956.

Edmonton District Planning Commission, A General Plan, The Municipal District of Stony Plain. Edmonton. 1956

Friedmann, J.R.P., "The Concept of a Planning Region", Land Economics. February 1956.

Gaffney, M.M., "Urban Expansion - Will It Ever Stop?" Land, The Yearbook of Agriculture, 1958. Washington, D.C.

Geddes, Patrick, Cities In Evolution. Williams and Norgate Ltd., London 1949.

Gertler, L.O., "District Planning in Alberta", Record of Papers, 1956 Conference, Town Planning Institute of Canada. Banff, Alberta.

Goundry, C.K., "Economics and Conservation", in The Canadian Journal of Economics and Political Science.

Gregor, Howard F., "Urban Pressures on California Land", Land Economics. February 1958.

Haar, Charles, Higgins, Benjamin, Rodwin Lloyd, "Economic and Physical Planning: Coordination in Developing Areas", in Journal of the American Institute of Planners, Vol. XXIV, No. 3. 1958.

Kreuger, R.R., "Changing Land-Use Patterns in The Niagara Fruit Belt", Transactions of the Royal Canadian Institute. Part II. October 1959.

Lower Mainland Regional Planning Board of B.C. Economic Aspects of Urban Sprawl. New Westminster, B. C. 1956



**PART TWO**

**CENTRALIZATION OR DECENTRALIZATION  
OF  
ECONOMIC GROWTH?**



## THE NATURE OF REGIONS: RELATIVE ADVANTAGES AND DISADVANTAGES

HARVEY S. PERLOFF and VERA DODD

from "HOW A REGION GROWS" 1963

Reprinted by permission of the  
COMMITTEE FOR ECONOMIC DEVELOPMENT,  
711 FIFTH AVE., NEW YORK 22, N.Y.

Certain industries contribute more to regional growth than others. Certain industries pay higher wages than others. Some are physically more attractive than the average. But not all regions have the relative advantages that attract such industries. Many can expect to grow only slowly on the basis of the industries for which they do have special advantages. This is another way of saying that not every area can hope to have the clean, fast-growing electronic and research industries it desires. Looked at in terms of relative advantages in resources, markets, human skills and labor costs, amenities, climate, and transport facilities and cost, some areas can hope to grow mainly by attracting labor-intensive industries; others, by attracting certain kinds of processing industries using relatively unexploited natural resources; some may have special advantages for certain types of assembly operations; still others for relatively intensive recreation activities, and so on.

The attraction of industry is clearly a competitive matter. There are many things that a region can do to enhance its locational advantages, particularly with regard to facilities, as in improving transportation, and major services, such as better education. But many features of nature and position within the nation are unalterable, and so a realistic appraisal of a region's relative advantages and disadvantages with regard to input-output access is an essential starting point for understanding its growth potential, as well as its past growth.

When one speaks of "access" as the sum of the relative advantages and disadvantages for the production of a particular commodity at some given place, more is implied than just the resistance, and hence costs, imposed by distance on the assembly of inputs and the distribution of outputs. The question of relative costs is critical; a favorable opportunity at a given place might not be exploited because of the existence of a better opportunity elsewhere. Therefore, "rivalry" and "opportunity" costs are important in the concept of access, as is the opportunity for new investment. Decisions on new investment are determined by relations at the margin -- that is, by small increments of change rather than by average relationships. Thus, it is quite possible that an area might have, on the average, favorable conditions for the production of a given commodity and yet not grow, simply because the opportunities for new investment are not quite as favorable in this area relative to other areas.

When regions are examined in terms of costs and markets, or input-output access, with regard to the requirements of specific industries and for all economic activities taken together, the extent to which they vary in their prospects for growth becomes apparent. The sixteen conceptual regions shown in the figure, oversimplified as they may be, serve to focus attention on the range of possible growth, and point up, for example, the fallacy of the extreme local economic-development approach which can lead to regard every region and community as capable of limitless economic expansion.

To the extent that a region's general access characteristics may be taken as a rough index of its potential for growth, Region 4 in the figure would have little prospect for growth, while Region 13 would have an unsurpassed growth potential. Other regions fall in between these extremes. Regions 1, 2, 3, 8, 12, and 16 are only a little better off than 4. In these cases, reasonable access to inputs is offset by lack of market access -- i.e., limited markets within easy reach -- or vice versa. Thus, for

FIGURE:

A SCHEMATIC PRESENTATION OF TYPES OF REGIONS THAT  
CAN EXHIBIT DIFFERENT GROWTH POTENTIALS

		Good access to basic inputs* from external regional and national sources		Poor access to basic inputs* from external regional and national sources	
		Good access to basic inputs in home region	Poor access to basic inputs in home region	Good access to basic inputs in home region	Poor access to basic inputs in home region
Poor access to external regional and national markets	Poor access to markets in home region	#1 II	#2 I	#3 I	#4 0
	Good access to markets in home region	#5 III	#6 II	#7 II	#8 I
Good access to external regional and national markets	Poor access to markets in home region	#9 III	#10 II	#11 II	#12 I
	Good access to markets in home region	#13 IV	#14 III	#15 III	#16 II

\* Not only basic resources but important intermediate sources need to be considered.

NOTE: Roman numerals indicate number of "good" access dimensions, and suggest relative over-all locational advantages or disadvantages.

example, one type of region may be developed to the extent that it contains an important mineral resource which is much in demand, but its development may be essentially limited to the exploitation of that particular mineral because of its disadvantage with regard to transporting almost all other products to distant markets. In general, regions 6, 7, 10, and 11 are somewhat better off because they at least have some access to both inputs and markets. Regions 5, 9, 14, and 15 are still better off because they have advantages either in large home markets or good access to national markets combined with advantages in acquiring inputs or in shipping out their products or both.

The restraints placed upon the future prospects for these regions also differ. Region 4 would have dim prospects of evolving into a region type with greater growth potential. Any change in its character must rest upon a doubly fortuitous set of circumstances. Technology, discovery, or institutional changes must bring about an improvement in its access to both inputs and markets. For Region 3, which has good access to inputs in the home region but no external markets, the prognosis is poor but not as hopeless. This region must either overcome the restriction upon its transfer relationships with other regions, or exploit its resources through a prolonged series of internal growth sequences. Region 12, with good access to external markets but poor access to input sources, might have a better prospect for breaking out of its dilemma. Discovery, technology, or even the pressure of growing demand might improve its access to basic inputs.

In weighing the growth prospects of a region, its present production characteristics or state of development are of course significant, but they do not entirely determine the course of future growth. Consider the direction of growth sequences. Development is generally thought to follow a prescribed sequence, with growth initiated by advances in primary extractive activity, followed by the development of more and more complex manufacturing, and followed in turn by more and more advanced servicing activities. But when one considers the variety of growth experiences suggested in the figure, it is evident that this is not always the case for the regions of an economically advanced nation.

A region such as type 11 might show a sequence of development completely the reverse of the sequence typically hypothesized. Florida is an example. It has had a limited scope for development on the basis of the size of the home market and relatively poor access to external input sources. The major characteristic of its input access in the home region has been its coast and agreeable climate. Its access to external markets for this resource was good because, in our highly developed economy, population movements often take the form of a quest for amenities rather than economic opportunity. The exploitation of a resource was dominant in this development, but it is a special kind of resource that might be identified as a resource-service. No primary activities in the old sense were associated with its exploitation. Rather, the exploitation of this resource required an intense development of tertiary activities which service population. In 1950, some 66 per cent of all employment in Florida was in the service activities. Market-oriented activities dominated.

With steadily mounting population -- from 1,836,000 in 1939 to 4,442,000 in 1958 -- a stage is developing where the availability of business services in Florida is attracting increasing quantities of secondary manufacturing activities. Typical of these are small-scale, market-oriented manufacturing, such as metal construction products, and relatively foot-loose activities such as electronics. As the wealth and size of the population grows, deficit food supplies make possible the use of agricultural lands which at an earlier date could not be considered a significant economic resource. This calls for an expansion in the primary sector of the economy. In this situation the tertiary-secondary-primary sequence is more logical than the reverse.



A growth sequence may possibly start in the "middle" and perhaps go both ways. A region of type 6 or 8 might exhibit this kind of sequence. Sometimes the exhaustion of a resource or the development of a substitute may leave a region "overdeveloped." If labor is slow in moving out, the pool of relatively immobile labor with depressed wages may attract secondary manufacturing activities oriented to cheap labor -- as has been happening in the Appalachian mining areas. The new secondary activity may induce growth sequences that lead to expansion in primary, tertiary, and other secondary activities. If this should happen, the region may regain a level of growth and production commensurate with that of other regions.

The variety of growth experience is apparent not only in the different sequences that are possible but also in the variety of functional pathways it might take. For a region (such as 7) with good access to inputs and markets only in the home region, growth is largely restricted to the internal evolution of specialization characteristic of more or less "closed" regions. In another region (such as 11) growth may take the form of interregional specialization in response to external stimulation. In other regions (such as 13) it is more apt to be compounded of elements of both external and internal response. A region (such as 10) which has poor access to inputs and markets in the home region might sustain considerable growth because of its nodal, or strategic, position with reference to external sources and markets.

Regions vary widely in their capacity to achieve mature development. A rationalized, variegated, mature development of economic functions is unlikely in a region that does not have good access to large external national markets. All of the functions that are dominated by important external and internal scale economies would be denied to it. Such a region may have to continue its development through more limited specialized activities. Given sensible policies (and good luck) its people may enjoy high levels of living, but substantial growth in volume would be unlikely.

## INDUSTRIAL DECENTRALIZATION

Yves Dube, J. E. Howes, and D. L. McQueen

Housing and Social Capital,  
Royal Commission on Canada's Economic Prospects, 1957  
Hon. Walter L. Gordon, Chairman

Reprinted by permission of  
Roger Duhamel,  
Queen's Printer,  
Ottawa, Canada.

The location of most industrial plants is, inevitably, a compromise. The ideal location would be one where labour, energy, and raw materials were all cheap, plentiful, and close at hand, and where there was a large, easy-to-serve market in the immediate vicinity. In practice, there are few places which can offer all these desiderata together, and the decision of where to locate involves a balancing of considerations, including the highly important one of transportation and transportation costs.

Occasions arise when a single requirement, such as that of electric power in the case of the primary aluminum industry, all but overwhelms every other locational influence. More often, it is a matter of two or three considerations combining to outpull the rest. For many industries, a large urban area which satisfies the labour desideratum, which is itself a major market and is close to other markets, and which is well served by transportation agencies, will seem attractive even if energy is not especially cheap and raw materials have to be brought from a distance. The complexity and interdependence of many industrial processes make, too, for a snowballing effect: certain kinds of plant attract others.

In the early years of the century, when coal was still king, when the transport of raw materials and finished products over roads and streets was a matter of horse-drawn drays, and when the urban labour force came to work on foot or by street car, there were good reasons for industry not only to locate in cities, but to cluster in more or less central parts of cities, close to the confluence of railway lines or on the waterfront<sup>1</sup>.

The advent of electricity and of automobile and truck transport has gone some way to weaken the attraction of central districts. Energy supply, materials, products, and labour force have all become more mobile. It has become possible to locate away from the centre; it has also become positively desirable in some cases. Rising labour costs have encouraged a trend toward one-storey, mechanized methods of warehousing, materials handling, and production. Employee parking lots have become increasingly necessary. To satisfy the resulting land requirements in a closely built-up district is likely to be extremely costly.

Growing traffic congestion in central districts has also helped to push industry outward.<sup>2</sup>

Thus, in certain senses and to a certain degree, decentralization does appear to be occurring. It is important to note, however, firstly, that the movement is primarily a relative one--old plants are not being uprooted or abandoned so much as new plants are being built in new places--and, secondly, that the radius of decentralization may be

## FOOTNOTES (CONT'D)

<sup>3</sup>Probable Effects of Increasing Mechanization in Industry, p. 46, a study prepared for the Royal Commission by the Canadian Congress of Labour.

<sup>4</sup>See Barber, C. L., The Canadian Electrical Manufacturing Industry, p. 5, a study prepared for the Royal Commission.

<sup>5</sup>See Woodbury, C., assisted by Cliffe, F., "Industrial Location and Urban Redevelopment", The Future of Cities and Urban Redevelopment, C. Woodbury, editor, p. 123.

<sup>6</sup>Bank of Nova Scotia, op. cit.

<sup>7</sup>Proximity must, needless to say, be measured in hours as well as in miles. If efforts to keep the metropolitan traffic problem under control prove seriously inadequate, the locational advantages of larger places will tend to be offset.

<sup>8</sup>No position is being taken here on the possibility of a greater degree of long-distance, interregional decentralization--from, say, central Canada to the Atlantic Provinces or the Prairie Provinces. It is being argued, however, that to the extent that such shifts occur, they will tend to be toward the larger urban places of the regions concerned--toward the Halifaxes, Winnipegs, Reginas, etc.

<sup>9</sup>A few recent figures may be of interest. The January 1956 issue of Industrial Canada contains a "Record of Industrial Development" for 1955, compiled from reports in the magazine during the year. The list includes plant erections and extensions, expansions of production, and other projects, planned and under way. No claim is made for the completeness of the tabulations, but they are believed to include all the important developments of the year.

Of the 297 projects listed, 87 were in the Toronto metropolitan area, 89 in other census metropolitan areas, 34 in what are here called "other major urban areas", and 87 in other areas.

A second list covers "new Canadian industries established in 1955." Of a total of 96 projects, 37 were in the Toronto metropolitan area, 29 in other census metropolitan areas, nine in other major urban areas, and 21 in other areas.

The Department of Trade and Commerce publishes a regional supplement to its annual Private and Public Investment in Canada: Outlook, giving figures of the value of new capital expenditure in manufacturing in census metropolitan areas. From these it would appear that over the period 1953-55 inclusive, some 10.5% of total new investment in Canadian manufacturing took place in the Toronto metropolitan area, and a further 32.4% in other census metropolitan areas.

It will be noted that these figures cover manufacturing only, which probably explains why Toronto's predominance seems less marked than in the Industrial Canada listings. The 1955 figures are estimates, and the 1954 ones are preliminary.

<sup>10</sup>Woodbury, C. and Cliffe, F., op. cit., p. 286.

## TRENDS IN INDUSTRIAL LOCATION IN CANADA

D. W. SLATER  
RESOURCES FOR TOMORROW CONFERENCE  
BACKGROUND PAPERS, VOL. I, (1961)

Reprinted by permission of  
ROGER DUHAMEL, QUEEN'S PRINTER,  
OTTAWA, CANADA.

Two kinds of regional distribution of industry should be distinguished: first, that among broad regions and, second, that between the principal and other urban centres within these broad regions.

The extremely high concentration of manufacturing in Ontario and Quebec has persisted for several decades. Some slight relative decline in the density of manufacturing in Ontario and increase in the density in Quebec has taken place since the 1920's. The density of manufacturing in the Atlantic Provinces is now low and has declined for some time; in B.C. it is much higher than in the Atlantic Provinces, but it has declined slightly. Of areas outside Central Canada the only significant increase in the density of manufacturing activity since the 1920's has occurred in the Prairies. Oil and gas appear to be the main explanation of the latter, but other factors have contributed. The regional trends in non-manufacturing jobs are clear: the urban elements of these jobs are concentrated in the central provinces; there are some indications that this concentration is now higher than it used to be.

Regarding the intraregional location patterns as between big and little cities, no general trend of centralization or decentralization of urban populations has occurred during the last 30 years. This stability in city-size distribution has been accompanied however, by a diffusion or urban jobs, i.e., by the spreading out of jobs from the centres to the suburbs of the big cities. Dispersion, the spreading of jobs from big cities to smaller communities some distance away, has by contrast not been significant. The over-all locational distribution of manufacturing activity within broad regions shows a slight trend toward decentralization. However, there has been some centralization of non-manufacturing, city-forming jobs.

Factors that explain the slow modification of the traditional interregional pattern, e.g. as in the rise of industries in the Prairies, are improvement in the resource base, the shelter of regional markets under the umbrella of high long-distance transportation costs, and the growth in the scale of the regional market. Intraregional centralization is explained in part, by the greater range of services and by the greater security of investment which are products of bigness, of urban centres.



Public policy in relation to industrial location should be based on developing, fully, the underlying economic advantages of an area.

The desirability and possibility of decentralization of industry are among the most enduring and seductive ideas found in discussions of economic development. Howard, Geddes and Mumford argued and preached about decentralization of industry from big cities to smaller ones. England, Sweden and France have all tried policies to spread out industry not only from big cities, but also from the principal industrial belts to other sections of their countries. In Canada an acceleration in the industrial development of broad regions like the Prairie and Atlantic provinces and of subregions like eastern Ontario or western Manitoba has often been advocated as an ideal solution to economic and social problems. This paper contains a brief report on some trends in the regional distribution of industry in Canada, some comments on the reasons for the trends and a few general suggestions about policy. Two kinds of regional distribution are examined; first, that among broad regions, approximated by provinces or groups of provinces; and, second, that between the principal and other urban centres within these broad regions.

## 1 - The Regional Distribution of Industry in Canada

### (i) A Few Preliminaries

Though they are not ideal for the purpose, provinces or groups of provinces are used in this discussion as regions. In dealing with any regional unit of analysis, one of the most common and useful ideas is to distinguish the basic portions of industries from the non-basic or induced or derived portions. The basic elements are those which provide the underpinning or rationale for the economic activity of a region; the non-basic or induced or derived portions of industries in a region are those which mainly serve the population within the region without strong competition from outside the area. Much of the manufacturing activity carried on in a region is of a basic type, though every region has some non-basic manufactures, such as the bottling of softdrinks and the baking of bread. Barber shops and retail stores are obvious examples of induced activities in any relevant system of regional classification.

We need not discuss here the many subtleties and limitations in the use of these distinctions between basic and non-basic industries; we believe that they are useful as rough and ready tools for telling the story. In setting out regional trends in industrial location in Canada, the attention will be focused mainly on the basic industries in each area. The resource industries, most of the manufacturing, the upper echelons of business and government organization, and parts of the tourist and communications businesses appear to be the main basic industries with which we should be concerned. Regarding manufacturing, Hoover's ' familiar distinctions between resource-oriented, market-oriented and footloose industries will be used. And now on to the story.

### (ii) The Regional Distribution of Manufacturing Activity

Manufacturing activity deserves special attention both because it is a large part of the basic employment of some regions and because it is the center of attention of advocates of industrial decentralization. More than 80 per cent of the total employment in manufacturing in Canada was located in Ontario and Quebec in 1956, most of it in the band from Windsor to Montreal (Table 1). More interesting, however, is the density of manufacturing activity; that is, the proportion of

Canada's manufacturing jobs in an area in relation to the population or the labor force. The density figures which are set out in Table 1 (lines 7 to 9) show that Ontario and Quebec are the only provinces which have a concentration of manufacturing jobs even greater than their share of Canada's population, and non-agricultural labor force. When attention is confined to manufacturing other than of primary and local natures, the relative concentration of Canada's manufacturing activity in Ontario and Quebec is even higher; one rough estimate is that more than 88 per cent of this more restricted range of manufacturing employments are found in the two central provinces.

Some interesting features of the industry-spatial distribution of manufacturing activity in Canada are provided by data on the various industrial groups within manufacturing. Such data for 1956 are found in Table 2, which is set up to show the relative concentrations of various manufacturing activities in the provinces.<sup>2</sup> The following appear to be the main conclusions from the data.

First, for all industry groups except tobacco products, clothing and wood products, Ontario contains proportionately more of the manufacturing jobs of Canada than it contains of Canada's population or labor force or urban population. But the greatest concentrations of Canada's manufacturing in Ontario are in the industry groups: rubber goods, electrical apparatus and supplies, iron and steel products, transportation equipment, miscellaneous industries, printing and publishing, non-metallic minerals, chemicals and non-ferrous metals.

Second, the structure of manufacturing industry in Quebec is quite different from that in Ontario. For Quebec, relatively high concentrations of Canada's manufacturing activity are in the industry groups: tobacco products, clothing, textiles, leather products, knitting mills, chemicals and non-ferrous metals. The most notable gaps in Quebec's industrial structure, in comparison with Ontario, are the absence of a large primary iron and steel industry and an automobile industry.

Third, the Atlantic Provinces have a larger share of Canada's manufacturing jobs than they have of the Canadian labor force for only two industry groups: foods and beverages and paper products. Aside from these, the other relatively high densities of manufacturing in these provinces are in wood products and the transportation equipment groups, the latter mainly reflecting shipbuilding and a railroad car factory.

Fourth, except for foods and beverages, the prairie areas had a smaller share of Canada's manufacturing jobs in each industry group than they had of Canada's population or labor force; they had, however, a relatively high density of jobs in the manufacture of petroleum and coal and non-metallic minerals, in printing and publishing, and in the production of clothing, wood products and transportation equipment.

Fifth, for British Columbia relatively high densities of manufacturing jobs are found in the industry groups: wood products, non-ferrous metal products, paper products, foods and beverages and products of petroleum and coal.

These observations tempt us toward generalizations about the location of manufacturing industry in Canada.

Table 1. Interprovincial Distribution of Population, Labor Force and Manufacturing Employment in Canada 1956

	Ontario	Quebec	Maritimes per cent	Prairies	B.C.
1 Population	34.12	29.22	11.14	18.02	8.83
2 Urban population	38.37	30.31	8.13	13.73	9.60
3 Labor force	36.93	27.95	9.52	17.49	8.23
4 Non-agricultural labor force	38.56	29.03	9.84	13.37	9.09
5 Employees in manufacturing	47.40	32.98	4.86	6.74	8.03
6 Employees in manufacturing excluding primary and local	53.12	35.44	2.92	5.48	3.27
Density measures - Concentration of manufacturing jobs relative to:					
7 Non-agricultural labor force [(5) as a per cent of (4)]	122.9	113.6	39.4	50.4	88.3
8 Urban population [(5) as per cent of (2)]	123.5	108.8	59.8	49.1	83.6.
9 Total population [(5) as per cent of (1)]	137.9	112.9	43.6	37.4	90.9
10 [(6) as per cent of (2)]	138.4	115.9	34.9	39.9	34.1

Source: "Population and Urban Population", Census of Canada, 1956 "Labour Force", June 1956 issue of the Monthly Labour Force Survey "Employees in Manufacturing", Census of Manufactures, 1956.

Note: Primary and local manufacturing was measured roughly as employees in following industry groups: foods and beverages; wood products; paper products; printing and publishing; and non-ferrous metal products.

Table 2. Interprovincial Analysis of Structure of Manufacturing  
based on Numbers Employed, in Canada

	Per cent of Canadian Total					Relative Density of Manufacturing (per cent of group in area divided by per cent of Total Canadian Manufacturing in area).				
	Ontario	Quebec	Maritime	Prairies	B.C.	Ontario	Quebec	Maritime	Prairies	B.C.
Population	34.1	29.2	11.1	18.0	8.8					
Urban population	38.4	30.3	8.1	13.7	9.6					
Employees in manufacturing	47.4	33.0	4.9	6.7	8.0					
Industrial Group employees										
Foods and beverages	39.96	25.77	10.81	13.78	9.21	84.3	78.1	222.4	204.4	114.7
Tobacco products	20.71	79.22	-	-	-	43.7	240.0	-	-	-
Rubber products	69.98	29.72	-	0.05	0.22	147.7	90.1	-	0.7	2.7
Leather products	41.31	53.13	1.58	2.34	1.70	87.2	161.0	32.5	34.7	21.2
Textile products	39.18	56.10	2.02	1.67	1.02	82.7	170.0	41.6	24.8	12.7
Clothing	26.96	62.91	0.13	7.68	1.65	56.9	190.6	2.7	114.0	20.5
Knitting mills	45.44	47.87	3.29	0.56	1.27	95.9	145.0	67.8	8.3	15.8
Wood products	27.37	25.58	7.28	7.45	32.27	57.9	77.2	149.8	110.5	401.9
Paper products	38.13	39.72	10.07	2.32	9.74	80.5	90.0	207.2	34.4	121.3
Printing, etc.	50.62	27.01	4.15	10.98	7.22	106.8	81.8	85.4	162.9	89.9
Iron and steel products	62.64	22.64	4.19	5.40	5.11	132.2	88.8	86.2	8.01	63.6
Transportation equipment	59.74	24.02	5.34	1.85	4.03	126.1	72.8	109.9	101.6	50.2
Non-ferrous metals	48.53	34.98	-	2.18	12.52	102.4	106.0	-	32.3	155.9
Electrical apparatus and supply	68.02	29.18	-	1.47	0.99	143.5	88.4	-	21.8	12.3
Non-metallic minerals	50.71	29.34	3.79	11.46	4.71	107.0	88.9	78.0	170.0	58.7
Petroleum and coal	42.17	20.71	-	19.15	9.18	89.0	62.8	-	284.1	114.3
Chemicals	49.02	40.12	0.97	5.01	4.78	103.4	121.6	20.0	74.3	59.5
Miscellaneous	60.34	31.49	6.75	5.03	3.25	127.3	95.4	138.9	74.6	40.5

Source: Computed from D.B.S. Census of Manufactures, 1956.



Outside of south-central Canada, resource sites and the servicing of local markets appear to be the main explanations of the existence of manufacturing jobs. The forests of British Columbia and the Atlantic Provinces draw wood and paper manufacturers; the mineral bodies in these areas have attracted metal-refining industries. The orchards and fisheries of British Columbia and the Atlantic Provinces draw food-processing industries of more than local significance; similarly the grain fields, the pastures and the feed lots of the Prairies draw flour and feed mills and slaughter houses. Local markets everywhere provide the basis of some food processing, printing, iron-founding and the manufacture of concrete products.

The only industry distributions outside of Ontario and Quebec that do not fit easily into the above generalizations are: the relative density of jobs in clothing, printing and publishing and transportation equipment in the Prairies (reflecting mainly the needle trades and printing in Winnipeg and the CNR railroad car shops in Transcona and Calgary); the proportionately large activity in manufacturing transportation equipment in the Maritimes (which was commented on above); and the relative concentration in the manufacture of petroleum products in British Columbia (reflecting a sea-coast terminal location).

During the last 30 years, manufacturing activity has increased in Canada as a whole and in each of the broad regions. The surprising feature, however, is how little change has occurred in the regional distribution of Canada's manufactures. Ontario and Quebec contained 81.7 per cent of the total Canadian manufacturing jobs in 1926 and 80.4 per cent in 1956. The fraction of the total jobs located in the Atlantic Provinces has declined and in the Prairies and British Columbia has increased. But how has the regional distribution of Canada's manufacturing jobs changed in relation to the distribution of the population and the labor force? The relative density of manufacturing jobs has decreased in the Atlantic Provinces, in Ontario and in British Columbia. The share of Canada's population and urban population in the Atlantic provinces has not declined by as much as the share of Canada's manufacturing jobs in these provinces during the last 30 years. British Columbia's share of Canada's population has increased by more than its share of Canada's manufacturing jobs. The Ontario share of Canada's population has increased but of Canada's manufacturing jobs has diminished. For Quebec and the Prairies, the density of manufacturing jobs has increased substantially.

### (iii) Other Basic Regional Activities

Since manufacturing activity is a small part of the economic base outside of Central Canada, one must look elsewhere for the economic rationale of these other areas. The most important elements in the base of British Columbia, the Prairies and the Atlantic Provinces are in the resource industries; agriculture, fishing, forestry and mining in the Maritimes; and agriculture, mining and the production of oil and gas in the Prairies. In Ontario and Quebec the resource industries are very large in size but they are a less important element of the overall provincial economic base than are manufacturing operations.

The great change in the structure of Canada's resource industries during the last 35 years has had very important regional implications. Canada's export trade in agricultural products has decreased very substantially compared with the over-all size of the Canadian economy; this trend, together with the increase in agricultural productivity has tended to reduce enormously the agricultural labor force as a base for the Prairies and for the Maritimes. The substitution of oil and gas for coal as a source of energy, together with the discovery of rich resources

of oil and gas in Western Canada has led to a comparatively rapid expansion of the mineral resource base in the Prairies and comparatively rapid decrease in that aspect of the base of the Maritimes. The growth in the pulp and paper industries and in the extraction of non-ferrous metals has provided a stimulus to growth in many parts of Canada, but more so in British Columbia and in northern Ontario and Quebec than elsewhere. Perhaps the most important conclusion to be drawn from this evidence is that, for many regions, the density of their manufacturing activity seems to vary directly, though perhaps not strongly, with the over-all growth of their resource base.

One other aspect of the locational distribution of industry among regions deserves comment - that is, the regional distribution of the high-level functions of business and government organization and institutions which serve, at least in part, the national market. Our impression is that these activities are comparatively heavily concentrated in Toronto, Montreal and Ottawa. Headquarters of national companies and of government organizations; the main institutions of the capital market; higher education: the concentration of these in southern Ontario and Quebec are just some examples of a general phenomenon. Our impression is also that these activities have become progressively a larger part of the economy, and that they are more concentrated in southern Ontario and Quebec now than they used to be.

## II - Trends in the Intraregional Distribution of the Location of Industry

When one starts with regions as large as provinces or groups of provinces, there are many possible intraregional or subregional lines of analysis that might be pursued. The one that is selected here concerns the distribution of jobs and people between the big cities, smaller cities and towns and villages. The hopes of many a district are often attached to the idea of attracting industry from the big cities, or at least of attracting a somewhat larger portion of the growth of industry away from the big cities.

I have published elsewhere<sup>3</sup> a paper on trends in the distribution of people and jobs in Canada, dealing particularly with the question of decentralization of manufacturing jobs from the big cities. I will simply summarize here some of the principal conclusions from the other paper.

1. When considering the decentralization of industry or of people from old locations in big cities, two kinds of movements should be distinguished. The first is a relative spreading out of the jobs or of people from the centres to the suburbs of the big cities; this is called suburbanization or diffusion. The other is a relative spreading out of the jobs from the greater city area of big cities to smaller communities which are some distance away; this is commonly called dispersion of jobs or people.
2. The urban proportion of the Canadian population has increased at a very rapid rate since 1900, but particularly during the last 20 years.
3. The concentration of the urban population of Canada into the bigger city units increased between 1901 and 1931, though the degree of increase in concentration was small; since 1931 probably and since 1941 certainly, no further concentration of the Canadian urban population in big cities

has taken place. Or to put the point another way, medium and small-sized cities, on the average, have grown as rapidly as big ones in Canada during the last 20 years.

4. Since the 1920's but mainly since 1939, there has been some dispersion of manufacturing activity, in the sense that a smaller fraction of such activity is concentrated in the major city industrial areas in Canada now than before the War. However, this dispersion is largely a phenomenon of the Ontario manufacturing scene; very little dispersion has taken place in Quebec.

5. There has been a massive diffusion or suburbanization of manufacturing activities, in the aggregate, from the centres toward the periphery of the major city industrial areas; this movement has been stronger in Ontario than in Quebec, but it has appeared in some degree in all parts of the country. The change has taken place mainly since 1948.

6. Probably the most important thing to say is that the changes in the over-all locational distribution of manufacturing activity within broad regions have been small, despite the unusually great opportunities to make changes if they were desired, because of the extraordinarily high rate of growth of manufacturing activity in Canada.

7. While some dispersion of manufacturing appears to have taken place, particularly in Ontario, no dispersion appears to have occurred in the over-all locational distribution of urban jobs since 1941. Thus it appears that a process of centralization has probably occurred in the location of non-manufacturing city-forming jobs in Canada.

### III - Interpretations and Explanations

Our search is for some kind of consistent explanation of both the inertia in the patterns of industrial location and the particular limited changes in the patterns that have occurred. Let us deal first with the interregional aspect of the patterns.

One of the most helpful ways of looking at this problem is to try to compare the growth in the Prairies and in the Atlantic Provinces, both in relation to southern Ontario and Quebec. The concentration of Canada's people and jobs and industry in southern Ontario and Quebec has continued to be very high. There are, however, some indications of decentralization of industry to the Prairies but not to the Atlantic Provinces. Also, it appears that economic growth in the Prairie Provinces has been substantially more rapid than in the Atlantic Provinces in recent decades.

The fundamental difference between recent experience in the Prairies and the Atlantic Provinces has been due to oil and gas. The agricultural export staples of the Prairies have been a relatively declining industry for some time; and if it had not been for the development of a new resource base of oil and gas, the Prairies would probably have experienced economic growth not too different from that of the Canadian Maritimes during the last three decades. The new resource developments in the Prairies have made possible the economic development of some secondary industries. While oil and gas appear to be the most important contributors to renewed industrial growth in Western Canada, two other aspects of this development bear comment. First, it appears that the costs of transporting many kinds of goods from the outside of the Prairies have increased relative to the value of the goods; the main factor appears to be the increase in the costs of railway transportation of high class merchandise over long distances. Such a trend provides a bit more natural protection of those Prairie-based industrial



enterprises which serve the regional market. Second, the growth in the scale of the market itself has tended to make feasible some branch plant operations as well as some new indigenous enterprises.

The Atlantic Provinces, on the other hand, do not seem to have had any fundamental improvement in their resource base comparable to that experienced by the Prairies. The net effect of increase in transportation costs on industrial opportunities in the Maritimes appears to have been unfavorable. Higher costs of shipping goods into the area to provide some natural protection to local enterprises; but higher costs of shipping goods out limit the opportunity for export sales. For the Prairies the combination of pipelines for gas and oil (one of the few instances of large decrease in transportation costs), and the fixed (low-level) railroad rates on the Prairies' principal agricultural exports have meant that transportation costs have not been an increasingly inhibitive factor to those exports,

Let us now consider the intraregional aspects. The important things to explain are: (i) the continuation of concentrations of urban peoples and jobs in the vicinities of cities of large and medium size; (ii) the decline of small towns; and (iii) the limited degree of intraregional decentralization of manufacturing and centralization of non-manufacturing activities that has taken place.

One of the most fundamental factors affecting locational choices in recent decades has been the improvement of medium-distance communications; by automobiles and truck over greatly-improved roads; by telephone, television and radio; and for electricity and gas. For freight movements over medium-length distances, say up to 300 miles along major highway transportation routes, the quality of truck service and its comparative cost position seem to have improved greatly relative to the railroad, and relative to the values of goods. The area which can thus be effectively integrated into the industrial complex of the metropolitan centre has been greatly increased, other things being equal. This change tends to encourage some decentralization of industry from the centre of a region at least along major highway routes. The increased use of automobiles for private journeys to and from work means that the work force of a given centre can be drawn from a wider area than formerly. People who live at the periphery of a metropolitan market area can shop and find their recreation and services in cities of substantial size much more easily and economically now than used to be the case. The market area which can be serviced effectively from a given wholesale centre has been greatly enlarged. I believe that the improvements in communications over medium distances are principal factors in the decentralization of manufacturing activity, on the one hand, and the centralization of some other services, on the other hand. The small town and village as a service, educational and recreational centre has lost out to the bigger ones; the decentralized pattern of wholesaling activities has given way to a more centralized one.

A second very important factor which reinforces the first is the relatively rapid growth in the demand for those services which are almost inherently the products of large cities. Of higher incomes, increasing proportions have been devoted to medical services, restaurant meals, radio and television entertainment, higher levels of education - all activities of large cities. The increasingly complex arrangements in production have led to rapid increase in the use of services of consulting engineers, architects, accountants, advertising agencies and specialized legal talent. On balance the growth of government activities too seems to have contributed to the centralization of peoples.

A few features of the mix of industry and of modern technology seem to have worked toward diffusion and decentralization of manufacturing. Modern continuous-flow processes of production are



best organized in one-story buildings set on large pieces of ground. The increasing importance of industrial water supplies, on the one hand, and of easy disposal of wastes, on the other, works against locations at sites close to the centre of big cities.

One of the persisting mysteries of industrial location concerns the limited amount of decentralization of manufacturing activity that has taken place. Geographers often suggest that it would be possible to attain such a decentralization for very little cost, given modern technology. They have serious doubts about the economies of agglomeration of manufacturing in big cities, in view of the higher wage rates, higher taxes, higher land costs, and the diseconomies of congestion in such big cities. It seems to me, however, that one of the great errors in many locational analyses is in treating the world in a static way. In fact, for many business making industrial location choices, the world is a rapidly changing and uncertain place. Agglomerations of industrial activity provide a far better possibility of coping successfully with uncertainty than do decentralized locations. The opportunities for fine marginal adjustments, the safety margins that are permitted by short-term contracts for staff, space, intermediate products and sales arrangements, the opportunity for flexibility in the big cities, the access to a wide variety of expert help which can be brought in small units; the intimate and speedy contact with the most important markets, the opportunities for intense specialization; - for many industries these are enormous attractions, and big cities at important nodes in the system of communications fill the bill.

This factor is, I believe, one of the main forces accounting for the continued high degree of concentration of industry in or close to the big cities. Most policies aimed at industrial decentralization underrate the agglomeration economics offered by sites in the large cities under conditions of risk and uncertainty.

#### IV - Policies Regarding Industrial Location

I know of no field in which it is tougher to formulate and execute sensible policies than that of industrial location. Every region, sub-region and city feels a responsibility to take care of its own. The trick is to nourish and encourage one's own without protecting and shielding them against the realities of the world. Buy local preferences in governmental purchases pose the issue quite sharply. There is no doubt but that some local industries might be protected by such policies, indeed some local industries might thus exist when they otherwise would not. But such buy local preferences impose costs on the communities which follow the practice. The real issue is whether such costs yield much larger returns for the community it incurred in some other way. I personally have a very strong preference for policies which exploit the underlying economic advantages of an area most fully by trying to do some jobs better than they are done elsewhere. For example, those cities for which the main rationale is the provision of regional services (in trade, medical and education services, and in repair and administration) will usually obtain better returns to efforts at improving this base than the attempts at attracting manufacturing industry.

In our society the bulk of the decisions regarding industrial location are made by a private decentralized process operating through business and the locational decisions of people. Public policy does not now consist, nor is it likely to consist, of government directives to locate industries and peoples in specific places. In most countries the directive of governments have never done more than state where industry may not go. The really important part of public policy with

respect to industrial location is concerned with shaping the environment and providing incentives to encourage or discourage particular patterns of locational decisions.

The regorous use of incentives to shape industrial location has been tried in the United Kingdom since the end of the war; they have had a mixture of successes and failures. The British had two distinct problems; they wished to limit the growth of big cities; and they wished to stimulate the industrial growth of depressed regions. Some people thought that both of these problems could be solved by a single unified policy of vetoes on some and incentives toward other industrial locations. By encouraging industries to go to the depressed areas and by limiting their possibilities for expansion in the big cities, both problems would be solved.

Despite very considerable financial help from the central government, the policy has not been particularly successful in bringing about a shift in the pattern of manufacturing locations in England from the main concentrations to be depressed areas. However, there has been considerable success in limiting the growth of manufacturers in the big cities, the growth having been diverted to new towns and small communities 20 to 50 miles beyond the bounds of the major metropolises. The success in limiting the growth of manufacturers in the big conurbations has not meant, however, that comparable success was realized in limiting the over-all growth of jobs in these areas. The process of centralization of non-manufacturing jobs which has gone on in North America has also operated in the United Kingdom and Western Europe. The London County Council has recently been trying to encourage some shift of office jobs out of London but with very little success thus far.

I conclude by offering a few specific suggestions. First the metropolitan region as a whole is the relevant unit for local area actions to promote industrial development. The divided local jurisdictions in many of our greater city areas and the scrambling to capture the prizes and avoid the over-all responsibilities of industrial assessments which divided jurisdictions induce, will not lead to a rational job of local industrial development. Second, if there are advantages to a decentralized pattern of industrial location, some of these accrue to broad regions and provinces as a whole; some of them are national. Thus it is sensible that some provincial and federal resources be used to provide incentives to encourage the desired pattern of industrial location. But I have very grave doubts about the abilities of governments to follow sensible policies in these areas.

## REFERENCES

<sup>1</sup> Hoover, Edgar M. *Location of Economic Activity* McGraw Hill Book Company, Inc., New York. 1948.

<sup>2</sup> In addition to the data on industry groups, an examination has been made of the interprovincial distribution of various manufacturing industries. Space precludes reproduction of the latter data here, but some of the industry information has been taken into account in the text.

<sup>3</sup> David W. Slater, "Decentralization of Urban Peoples and Manufacturing Activity in Canada" in the *Canadian Journal of Economics and Political Science*. February 1961.

## BIBLIOGRAPHY

Geddes, Patrick *Cities in Evolution* Williams and Norgate, London, revised edition, 1949; original edition, 1915.

Goodrich, Carter, et al, *Migration and Economic Opportunity* University of Pennsylvania Press, Philadelphia 1936.

Hanson, Eric, *Dynamic Decade*, McLelland and Stewart, Toronto. 1958.

Hoover, E.M., "The Measurement of Industrial Location", in *Review of Economics and Statistics*, XVII. November 1936.

Hoover, E.M., *The Location of Economic Activity*, McGraw-Hill Book Company, Inc., New York. 1948.

Hoover, E.M., and Vernon, R.L., *The Anatomy of a Metropolis*, Harvard University Press, Cambridge, Mass. 1959.

Howland, R.D., *Some Regional Aspects of Canada's Economic Development*, a study prepared for the Royal Commission on Canada's Economic Prospects, The Queen's Printer, Ottawa. November 1957.

Mumford, Lewis, *The Culture of Cities* Harcourt, Brace, New York. 1938.

Nicholson, R.J., "The Regional Location of Industry", in *Economic Journal*, LXVI. 1956.

Perloff, Harvey, et al. *Regions, Resources and Economic Growth, Resources for the Future*, Washington, 1960.

Slater, David W., "Decentralization of Urban Peoples and Manufacturing Activity in Canada." *Canadian Journal of Economics and Political Science*, XXVII. February 1961. pp. 72 - 84.

Slater, David W. *Consumption Expenditures in Canada*, a study prepared for the Royal Commission on Canada's Economic Prospects. The Queen's Printer, Ottawa 1957.

United Kingdom, *Report of the Royal Commission on the Distribution of the Industrial Population*. The Barlow Commission, HMSO, Cmd. 7540, London. 1948.

Vernon, R. L., *Metropolis*, 1985. Harvard University Press, Cambridge, Mass. 1960.

Wise, M.J. *Industrial Location, A Geographical Approach*, Inaugural Lecture at The London School of Economics and Political Science. May 4 1959. (copies available from Professor Wise).

Woodbury, Coleman, ed. *The Future of Cities and Urban Redevelopment*, University of Chicago Press, Chicago. 1953.

## **PART THREE**

---

### **SHAPING THE REGIONAL DEVELOPMENT PROGRAM**





## ECONOMIC AND PHYSICAL PLANNING: COORDINATION IN DEVELOPING AREAS

CHARLES HOAR, BENJAMIN HIGGINS, LLOYD RODWIN

JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS,  
VOL. XXIV, NO. 3, 1958

Reprinted by permission of the

JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS,  
917 FIFTEENTH STREET N.W., ROOM 800,  
WASHINGTON D.C. 20005.

Most national governments of developing countries are preparing economic development plans. These plans generally reflect negligible concern for the impact of that development upon national urbanization patterns. Local governments are preparing city and regional plans for physical development with little understanding of the implications of the national economic plans or of the ongoing economic forces. The situation calls for a coherent national policy for regional and urban development. The authors suggest legislative, legal, and administrative approaches that could facilitate coordination among the economic and physical plans at all levels of government.

Economic development planning for the less industrialized countries has acquired a somewhat familiar look. More or less common problems and similar "professional" guidance have generated a fairly uniform set of remedial efforts.

The core of an economic development plan is usually a budget for the public investment sector (at all levels of government), plus indications of what is expected from the private investment sector, including recommendations as to monetary, fiscal, and foreign-exchange policies, manpower-training programs, and the like, to encourage and direct investment in the private sector. In addition, policies might be fashioned to encourage such innovations as new techniques and technology, varying factor proportions, changing product mix, and exploration for new resources. Targets are usually set in terms of levels and patterns of investment, income, output, employment, and so forth; but the plan implies a certain location of industry and a certain distribution of population and thus a certain pattern of land use.<sup>1</sup>

Economic development plans concentrate on capital use; they do not as a rule include a plan for land use as such. Decisions as to land use are left to private investors, local governments, and implementing agencies of central governments, within the framework of capital allocation which is provided in the economic development plan.<sup>2</sup> Presumably if an appropriate allocation of capital is obtained, the appropriate allocation of management, labor, and land will follow automatically.

This assumption is, to say the least, extravagant. Though it has never been seriously tested, it has had some serious implications. One is the virtual absence of any consideration by economists of the optimum location of development. They have even neglected the crucial questions of rural versus urban growth, the distribution of new enterprises among cities, small towns, and villages, and the selection of growing points and leading sectors, which are the very core of economic development.

In the economic development plans of such countries as Indonesia, the Philippines, India, Mexico, and Puerto Rico, almost no consideration is given to where development should occur. Questions as to what scale or pattern of urbanization and regional development would best promote economic and social objectives receive little attention; neither do community or regional economic prospects and implications. The fact is that the economists, engineers, and agriculturalists who make up most development teams have not been trained to consider three-dimensional environmental questions; nor are they as a rule interested in them.

Physical plans (that is, city and regional plans), on the other hand, may be charged with equally serious limitations in the opposite direction. They reflect recommendations of physical planners. The chief concern of these planners is the physical environment, its nature and characteristics, the forces which shape this environment, the effects produced by this environment on society, the processes of change of this environment, and the means by which these processes may be guided to serve the community's purposes.<sup>3</sup> The role of these planners in government planning agencies usually is to help formulate possible urban and regional goals for the development of the three-dimensional environment and to seek agreement and official approval of them. They are responsible for: (a) long-range local development plans consistent with these goals for transportation, schools, and other public facilities; and also for (b) over-all land use or master plans, both to provide accessibility and to meet other spatial requirements of different activities, present and future.

The intervention of physical planning is predicated on the desirability of producing an efficient and attractive environment. It may occur in several ways: in surveying (or preferably in getting other specialists to help survey) regional trends in population and in economic and social characteristics to assure that diverse land use requirements are met in accordance with accepted development goals; in planning the location of the investment in public overhead capital; in developing zoning, building, and subdivision regulations which can prevent or help mitigate those problems developing from discrepancies between private and public interests.

In focussing on the internal problem of the city and region, the physical plans have tended to neglect national policies and programs. Yet these national decisions on roads, railroads, harbors, industrial development, and so forth might create insuperable or unnecessarily difficult urban and regional problems-- problems which perhaps might be avoided or minimized were they considered and dealt with in advance. The limited economic training and interests of the physical planners ill equip them to understand these development policies. At best they have tried to assess the consequences of these policies and to grapple with them as well as they could. They have played no role in shaping them or in pointing out to the economic planners or to the ultimate decision makers possible alternatives and their physical consequences. Conversely, regional physical development plans formulated in terms of land use affect as well as reflect probable investment, output, employment, and income. And if the physical planner neglects or misunderstands the implications of his proposals for national development, serious urban and regional problems may result, problems which perhaps might be avoided or lessened were they considered and dealt with in advance.

In short, in these developing countries, there are two groups of differently trained planners, operating on different levels of government and tackling with different tools and concepts problems which are in many aspects interdependent.<sup>4</sup> The assumptions of the economists have not disposed them to check the implications for physical development of their policies and programs; nor have they provided reliable economic analyses at the local and regional level. The limited training and institutional framework for city planning on the other hand has often led physical planners to an inadequate understanding of the economic consequences of their proposals for physical development and has had the effect of placing the economic development policies beyond their line of vision, even if they were interested.

It is, of course, possible that the pattern of development operates best under a system in which a curtain of indifference and independence separates these activities. But this possibility seems rather unlikely when examined explicitly; and in any case, there are an increasing number of circumstances tending to force the development of a more clear-cut urban development policy. For example, in Puerto Rico resource limitations, such as an inadequate water supply or physical barriers to development, are forcing examination of alternative development possibilities. Military necessities, as in the case of Israel's frontier settlements and Russia's urban developments beyond the Urals, might also push thinking along these unaccustomed lines. Similarly, dissatisfaction with the social problems and characteristics of existing urban patterns may impel policy makers to examine other alternatives. This is true for example in Indonesia, India, and Puerto Rico where there are strong official pressures in favor of decentralization.

On examining urban unemployment in India, Dr. W. Malenbaum has observed that the scale of population growth in urban centers is far out of proportion to employment opportunities. Some alternative development pattern, he suggests, needs to be pursued.<sup>5</sup> There is increasing concern expressed by others concerning the large outlay of scarce resources that huge metropolitan areas require in the form of overhead capital. Dr. Rosenstein-Rodan's studies indicate that overhead capital (ports, power installations, transportation, housing, schools, roads, other utilities, etc.) usually ranges from 50 per cent to 70 per cent of total capital available for investment in developing areas.<sup>6</sup> How to marshal these resources in impulse sectors or significant growing points to prevent their being frittered away in trivial efforts is a serious problem. Similarly, disproportions in development programs (such as ports without feeder roads, power installations without user equipment, industries without adequate housing, schools, and shopping facilities) are a subject for complaint in many developing areas.<sup>7</sup> Absence of national area development plans correlating specific development projects undoubtedly contributes to these failures. Since the United States, the United Nations, and the Colombo Plan donor countries are providing technical and capital assistance at all three levels, the problem of integrating these planning efforts takes on a new importance for this reason, too.

Emergency of distorted physical patterns (for example, a single large capital city and a more or less primitive hinterland) has also been a cause of concern because of the lack of balance this implies for development. The typical picture of an underdeveloped country is one which shows two sharply differentiated sectors: a peasant-agriculture-and-handicrafts sector using simple labor-intensive techniques, where man-hour productivity is extremely low, and where from one half to four fifths of the population earn their incomes; and a plantation-mining-and-manufacturing sector; using advanced techniques, where man-hour productivity is high but where only a small portion of the population is employed.<sup>8</sup> The advanced sector is often export-oriented and is quite often owned and managed by



foreigners. Both sectors are usually distinct geographically as well as technologically and economically. Sometimes they represent quite different regions.<sup>9</sup> Nearly always the two sectors appear in a contrast between one or a few large and growing cities and the surrounding countryside -- Djakarta, Surabaya, and Indonesia; Delhi, Bombay, Calcutta and India; Manila and the Philippines; San Juan and Puerto Rico; Harcourt and Nigeria; Tripoli and Libya--the examples can be extended to virtually every underdeveloped country. Since economic development policy aims to eliminate the lagging sectors, take full advantage of the leading sectors or "growing points," maximize the "spread effects" of growth where it occurs, and overcome the tendency for productivity of "leading" and "lagging" sectors to pull farther and farther apart,<sup>10</sup> an economic development plan must be concerned with inter-spatial relationships and conceived in terms of urban-rural relations. Intersectoral and interregional relations, instead of being a frill in underdeveloped countries to be superimposed on a more or less complete system, should be the very core of the analytical framework.<sup>11</sup>

Although the motivations vary in different countries, it should hardly be surprising to find many developing areas perplexed in one form or another by this problem. Rural transformation and urbanization are inescapable aspects of industrialization; and these countries are destined to experience many of the problems and sufferings endured by western countries during their industrialization period. From this point of view the most poignant question may be whether any positive steps are feasible, such as a more explicit national urban policy, which may help to reduce these inescapable difficulties and make this process a more bearable as well as a more efficient transformation.

## II

Can a more appropriate institutional framework to accommodate these aspects of planning be constructed? We believe so. A variety of administrative mechanisms is available which can be tailored to the appropriate institutional and historical context. One approach may be a reorganization of the decision-making process affecting land use and development planning. For example, a series of master plans might be established at the different tiers of government which would act each against the other as a series of "impermanent constitutions."<sup>12</sup> Ideally, plans for physical development should be prepared and officially adopted on at least the national and local levels, and, in most instances, on an intermediate or regional level as well.<sup>13</sup> These documents could serve--so far as legislation or documents can ever stir imaginations--to clarify and disseminate the physical development philosophy and goal. They will also serve as a series of constitutions: the local master plan as a local constitution against which to measure the local implementing legislation; the regional plan as a guide for the local plan and local legislation; and the national master plan as a measure for the local and regional plans and legislation. Similarly, the national plan, including an economic and over-all physical (and possibly social) development policy, would be the final framework within which these other plans would be fitted.

True, in case of conflict the appropriate local, regional, or national legislature need but re-enact its particular master plan, changing it so as to require similar changes in the master plan or regulations at the lower tier of government. But this need for formal step of amending the plan insures to some degree that the experts' long-range and coordinative contributions are given play in the real world. If the local legislature desires to reverse the planning commission's recommendations concerning a proposed municipal construction, it may also be desirable to require that for this purpose the legislature can amend the plan only by two-thirds or three-quarters vote. This might highlight the master plan's primary role as a constitution.

The enabling legislation, at any of the three levels, should also require the publishing of supporting studies for the plans, general assumptions, and goals. This procedure has the normal advantages of requiring administrative finding of fact. Not only is the body formulating the plan thus apprised of what it is to do and provided with background information necessary for sound regulation, but also the studies permit the community to analyze the alternative goals presented and to come to an intelligent decision. This procedure will also provide a medium for permitting local political pressure on the national economic decisions to be something more than simply emotional reactions as to an unfair allocation to a particular section of the country; to some extent it can be backed up by careful evidence as to present and future capacities of an area. Through the obtaining of data and their analysis, the electorate will become aware of the role of planning and the responsibility it carries. If there is still some type of judicial review as to the reasonableness of the activities of legislation and administration which impinge on property rights, the reviewing courts are helped in deciding whether the particular enactments make sense or not.

To be fully effective, these plans presuppose an affective and respected judiciary. True, the systems of constitutions could be umpired by the national legislature or a national administrative agency. But especially in those societies which have gone to extremes of planning there is a creative role for the courts in settling disputes among the governments at the various levels and also in asserting dominant interests at certain crucial points. The adjudicative process will be important for determining ultra vires actions. The courts can also foster a sense of impartiality, thereby achieving a greater satisfaction among individuals affected. So long as fairness is manifested there is a greater likelihood of a dedication of joint energies toward a common goal.<sup>14</sup>

There is another area where the court can play a role in reconciling and settling national and local interests. The more specifically the plan is written down, the less arbitrary its application is likely to be. Such a plan, which merges both the physical and economic goals, can spur private energies. In organizing their affairs, private individuals and organizations can take these statements of public policy into account. This is especially important where the promulgated goal is stimulating the fullest possible participation both by private capital in the expansion of the economy and by private landowners and users in the shaping of the physical environment. From this framework of legitimate private expectations the court can more rationally strike a balance between possible conflicting private and public interests. It can measure the presently contested activities against the document and its elaboration. It can also interpret agreements which have not foreseen certain novel difficulties.

### III

Suppose sentiment in some country reaches a point where advice is sought on how to formulate a feasible national urban development policy consistent with economic development and accepted standards of fair procedure. What suggestions might be made about the nature and possible content of an urban development policy? What would be some of the implications of such a policy? What problems might reasonably be anticipated; and what might be done about them?

The essence of a national urban development policy is the formulation of a general statement of principle or program in some official form. The aim would be to guide or influence public and private action affecting the pattern and scale of urban development in order to achieve certain objectives.

For example, in Britain the policy is to curb the growth of metropolitan London and to encourage development in other regions.<sup>16</sup> In a country like Puerto Rico, the policy might be to encourage urban development in one of three major cities instead of perhaps ten or twenty centers.<sup>16</sup> Or in India the policy might be to encourage development in smaller cities outside the existing large cities because of the tremendous overhead costs of urban development or perhaps for social and political reasons.<sup>17</sup> Whether the reader agrees or disagrees with any of these policies, it should be clear that the existence of some policies would help to guide development more effectively in line with human aspirations -- assuming these policies are feasible.

More specifically, how might such a program be developed? First, as indicated, it is essential to formulate the physical development objectives, to prepare certain studies to determine the best course of action geared to these objectives, and to secure agreement and some official formulation of policies. It is also essential to consider concurrently what steps might be taken to implement such a policy in order to be sure it is feasible and reasonably likely to achieve the specified goals.

The specific administrative arrangements would, of course, have to be adjusted to the constitutional, administrative, and planning institutions of each country. Where the private economy is not functioning well and where the public sector is more significant for development, plans must include both the traditional government activities of building roads, utilities, schools, parks, and the like, and activities ranging from the encouragement of private activities to direct governmental building of power installations, railroads, industrial plants, housing and hotels, and so forth. When the market economy is performing its responsibilities adequately, the government role may be less important. But it is still decisive in the provision of the basic overhead capital which may either stimulate or serve as a *sine qua non* for private activity. In most of the developing areas, however, the market economy is not working well, and hence some greater role for government is often inevitable and perhaps desirable if more rapid economic development is one of the significant objectives.

Though institutional arrangements may differ widely from country to country, in principle a national urban development policy would probably require the enactment of legislation establishing or authorizing the central planning agency (or council of urban advisors) at ministerial or cabinet level to prepare and coordinate an over-all development policy. The legislation should also require the preparation of development plans by national departments and local or regional units in accordance with procedures approved by the chief executive. More specifically, within the central planning agency:

- 1) There should be a unit concerned with the over-all physical development pattern. This unit would:
  - a) Review the principal physical development resources, problems, and needs of the country.
  - b) Formulate feasible physical development policies consistent with economic development policies.
  - c) Present the alternative policies in a form understandable to the general public.
  - d) Evaluate feasible alternatives, taking into account present trends in the distribution, functions, and prospects of cities and towns, the economic and population trends, resource limitations, the requirements of the industrial and agricultural development plans and programs, the role of transportation, social objectives, and the like.
  - e) Analyze the measures necessary to achieve different goals, such as techniques of control, economic incentives, compensation and other costs, time schedule



and priorities, and so forth, and recommend a course of action.

- f) Formulate the proposed policy and obtain approval or revision by the chief executive and the legislature so that the policy may provide official guidance and criteria for development.
- g) Develop procedures for testing whether progress is being made in achieving the goals, and whether amendments or revisions may be necessary.
- h) Determine the contents and form of an annual physical development report to the chief executive and legislature.

- 2) There should be a manual indicating the methods of preparing master plans and the items which should be included in such plans by government departments and agencies.

More specifically:

- a) The manual should describe the national urban development policy, established by the government.
- b) It should describe the need for preparation of development plans by other departments, the time periods and the general form and contents of such plans, and the need for review of such plans by the central planning agency for consistency with plans of other departments and agencies as well as with over-all economic development and physical development goals.
- c) The manual should indicate what kinds of assistance might be provided by the central planning agency in the provision of general bench-mark data, basic assumptions, advice on general policy, and so forth.
- d) The manual might discuss the method of preparing a specific development program to implement the general plans and the occasional necessity to establish committees to coordinate the programs of related agencies.

- 3) There should also be created a review and coordination function related to the work of the over-all physical development unit. The responsibilities would be to assist in the establishment of planning units and to stimulate and assist government departments and agencies in the preparation or revision of physical plans.

For example, the unit's staff would:

- a) Establish liaison and informal relations with the planning units of the government departments and agencies and develop sufficient familiarity with the problems and programs to furnish helpful advice when needed in capital budgeting.<sup>18</sup>
- b) Help to set specific deadlines for the completion of plans and make arrangements for occasional technical assistance, interpretations of general policy and data, preliminary review and discussion, and the like.
- c) Arrange for occasional conferences of planning staffs to explain the aims and bench-mark data, and to discuss problems.
- d) Review and obtain review by appropriate divisions of the central planning agency of plans prepared by other government departments and agencies.
- e) Review and obtain review by appropriate divisions of the central planning agency of the urban and regional master plans before official approval is bestowed.
- f) Provide guidance and assistance in the preparation of specific development programs to implement the general plans and assist in the establishment of committees to coordinate the progress of related agencies.



- 4) There should be collaboration between the over-all physical development unit and other appropriate officials in preparing physical, social, and economic criteria to help guide capital budgeting decisions.<sup>19</sup>
  - a) Past capital budgeting decisions and programs should be analyzed to see what value judgments and goals are explicit or implicit in these decisions.
  - b) Physical, social, and economic goals and their implications should be evaluated and priority schedules set to provide budgeting guidance for evaluation of proposed programs.
  - c) Approved plans of government departments and agencies and of cities and regions should be used for reference in budgeting recommendations.
  - d) Perhaps the manual should indicate what factors are to be taken into account in budgeting decisions, such as explicitly formulated goals, plans, development programs, and so forth.
  - e) Consideration should be given to the practicability of regional capital budgets to assess the complementary requirements and relative balance of different public development programs scheduled in different regions.

Clearly the proposal outlined above is only one way of approaching the problem of a national urban policy. Many adjustments in such a proposal would be necessary depending on the nature of the central planning agency, if any. Also, many details might be added, such as the possible desirability of regional specialists in a centralized planning agency to become expert on the needs of different regions and to report on the relative success or failure of past development programs and the needs that grow out of such programs. Reports of such advisors might be funnelled to the capital budgeting and the over-all development units for guidance on future decisions.

But granted the differences of detail for different situations, there are some important functions that could be served by such a policy. Simply the clarification of direction of development would be a significant advantage. Whether the policy was in favor of concentrated or decentralized urban development, or some alternative between the two, the existence of the policy would provide some conscious statement of preference for the physical patterns which might be produced, and some criterion to judge whether development is moving in this direction. It would also provide some prophecy of public action, and thus some stimulation or guidance in channelling private investment in desired directions. Through such a mechanism the government could exercise some powerful initiating and energizing role, some significant influence not only in sparking private development but also in influencing its location, in helping expand the market, and in helping to synchronize independent activities. It can, in other words, exert leverage or countervailing power against forces which otherwise would move ahead with inexorable momentum along lines which might be not only undesirable but also possibly avoidable. Most important of all perhaps, the existence of such a proposed development model makes possible the coordination and implementation of the different programs of the central and local government to ensure maximum effect and balance in the scale and location of development.

#### IV

There remain, of course, some tantalizing problems which this paper cannot presume to answer. What, for example, should be the strategic points of decision-making to be influenced by the different plans? How should specific planning powers and functions be allocated in different countries? How much control ought the plans to

exercise over capital allocation? What minimum procedural safeguards are appropriate in different cultures to protect individual property and investor's rights, yet ensure the national interest?

There is no single legal or administrative or political solution to the variegated problems lumped together under the label of physical or development planning. Each developing area is to some extent unique; each must live with its own problems; each has certain historical and institutional drives. The question needs always to be asked, which of the forces of private or public enterprise is the most dynamic in a particular situation is best qualified to effectively accomplish the job--meaning as far as possible to blend the dynamics of individual freedom and the dignity of the individual personality, maintaining the values of local sponsorship and increased consumer choice, at the same time achieving the paradoxical and contrary goals of economic growth and greater per capita income. While the different developing areas will necessarily come to individual conclusions, the role of the physical master plan and the national urban policy and its relationship to the economic development plans here suggested, may help achieve a little more effective social engineering.

#### FOOTNOTES

<sup>1</sup> See B. Higgins, "Development Planning and the Economic Calculus," *Social Research*, Vol. 23, No. 4 (Spring, 1956), pp. 35-36. Cf. also G. M. Meier and R. E. Baldwin, *Economic Development* (New York: John Wiley and Sons, 1957), and C. P. Kindelberger, *Economic Development* (New York: McGraw Hill, 1957).

<sup>2</sup> There are of course exceptions. Some public investment projects are defined in place terms. The detailed presentation of the plan, listing roads, railroads, airports, harbors, land reclamation, resettlement projects, and the like will very often provide place tags for these projects. More rarely, the economic development planning process includes an analysis of location factors, and the plans may include suggestions as to location of new private industries as well. In the rare cases where such suggestions are made, they are usually connected with new public investment projects, such as power and transport, which are expected to open up new opportunities for private industrial or agricultural investment.

<sup>3</sup> The Physical Environment of City and Region, the Proposed Focus of the Center for Urban and Regional Studies" (mimeographed), Massachusetts Institute of Technology, September 20, 1957; and K. Lynch and L. Rodwin, "The Theory of Urban Form," *Journal of the American Institute of Planners*, Vol. XXIV (1958), No. 4 (forthcoming).

<sup>4</sup> Social planning, utilizing the possible insights of the sociologist, cultural anthropologist, and social psychologist also deserves more explicit and significant consideration than it has been accorded heretofore, but this important aspect is beyond the scope of this paper.

<sup>5</sup> W. Malenbaum, "Urban Unemployment in India," *Pacific Affairs*, Vol. XXX, No. 2 (June 1957). See also E. E. Lampard, "The History of Cities in the Economically Advanced Areas," *Economic Development and Cultural Change*, Vol. 3, No. 2 (January 1955); B. F. Hoselitz, "Generative and Parasitic Cities," *Economic Development and Cultural Change*, Vol. 3, No. 2 (January 1955), pp. 278-294; J. P. Friedman, "Locational Aspects of Economic Development," *Land Economics*, Vol. 32, No. 3; and E. Weissman, "The Problems of Urbanism in Developing Areas" (mimeographed paper prepared for the Conference on Urbanism, Ford Foundation October 11, 1956).

FOOTNOTES (Continued)

6. See P. N. Rosenstein-Rodan, "Les Besoins des capitaux dans les pays sous-developpes," *Economic Appliquee* (Paris, 1954). The estimates are based on data for several countries; and of course the figures vary for each country. Professor Rosenstein-Rodan has told us he estimates that approximately from 20 to 25 per cent of the total applies to housing; and the bulk - about two thirds - applies to urban areas. Also, most of the nonurban proportion applies to transportation connecting urban areas. See also United Nations, *Measures for the Economic Development of Underdeveloped Areas* (New York, 1951); and P. N. Rosenstein-Rodan, "Problems of Industrialization in Eastern and Southern Europe," *Economic Journal*, Vol. 53, No. 210 (June-Sept., 1943), pp. 202-211.
7. For example, one observer reports: "Most cases of misinvestment or unbalanced investment on the part of Middle East Governments concern neglect either of projects complementary to other projects already underway, whether private or public, or of projects creating social or public overhead facilities whose benefits are common to many different lines of production." P. G. Franck, "Economic Planners in Afghanistan," *Economic Development and Cultural Change*, Vol. 1, No. 5 (February 1953), p. 339. Cf. also, "International Bank for Reconstruction and Development," *The Economic Development of Mexico* (Baltimore: The Johns Hopkins Press, 1953), pp. 150-151; and J. Froomkin, "Fiscal Management of Municipalities and Economic Development," in *Economic Development and Cultural Change*, Vol. 3, No. 4 (July 1955), pp. 309-321.
8. B. Higgins, "The Dualistic Theory of Underdeveloped Areas," *Economic Development and Cultural Change*, Vol. IV, No. 2 (January 1956), pp. 99-116.
9. No small part of the Indonesian disruption in 1958 is to be explained by the fact that the low-productivity sector is virtually identical with Java, and the high-productivity sector is virtually identical with the outer islands.
10. It is interesting to note that in Italy, where the spatial aspect of the development problem is inescapable because of the differentiation between productivity in the North and South, both the plan and the analysis underlying it tend to be largely in spatial terms. On this point see A. Bertolino, "Aree depresse e cultura sociale," *Economia Internazionale*, November 1957.

FOOTNOTES (Continued)

11. This fact was better understood by the Classical economist than by most contemporary economists; the Classical School was always concerned with relations between the agricultural and industrial sectors of the economy. Intersectoral relations played an explicit role in the Marxist as well. Later specialists on "oriental economics" such as Boeke were groping towards an intersectoral framework in their theory of "dualism," but were misled by the presentiment that sectoral discrepancies were based on sociological factors, whereas in fact they may be explained mainly in economic terms. An important part of the intersectoral relations, certainly, is the relationship between shifts in location of industry and economic growth. This relationship has been described by Professor B. S. Keirstead (The Theory of Economic Change, Toronto 1948), but he has not worked it into a systematic theory of growth, and his stimulating observations on the question should lead to further work on the subject.
12. C. Haar, "The Master Plan: An Impermanent Constitution," Law and Contemporary Problems, Vol. XX, No. 3 (Summer 1955).
13. C. Haar, "Regionalism and Realism in Land Use Planning," University of Pennsylvania Law Review, 105, p. 515 (1957).
14. This means, though, that the court in essence must be given an independent status in its search for claims and in the attaching of responsibility to conduct.
15. L. Rodwin, The British New Towns Policy (Cambridge: Harvard University Press, 1956).
16. E. Baranano, Plan Regional De Area Metropolitana De San Juan, Junta De Planification De Puerto Rico, 1956; and L. Rodwin, The Puerto Rico Planning Board: An Appraisal, Puerto Rico Planning Board, 1956.
17. W. Malenbaum, op. cit.
18. Capital budgeting can be located in the central planning agency or the bureau of the budget. This preparation of the budget is such a consuming operation that it is generally advisable to have a separate unit prepare the criteria for the guidance specific budget decisions.
19. See footnote 18.





## REGIONAL DEVELOPMENT RESEARCH

PATRICK M. DOWLING

TENTH BRITISH COLUMBIA NATURAL RESOURCES CONFERENCE 1957

Reprinted by permission of the

EXECUTIVE OF THE BRITISH COLUMBIA NATURAL RESOURCES  
CONFERENCE

Research is becoming an increasingly important element of economic activity. In Canada and the United States, expenditures on basic and applied research are increasing at a rapid rate. This research involves not only the various physical sciences and engineering but economics and the other social sciences as well.

An important part of this effort involves applied regional development research, which I shall define as research related to planning for the economic development of a specific geographical unit. I do not have information on the dollar volume of applied research on regional development problems in our respective countries. Figures are available, however, to show the nature of the interest in regional development research, planning and promotion.

In 1956, for example, Canadian provinces and municipalities spent about \$6 million seeking new industrial and commercial enterprises for their respective areas. This sum is  $3\frac{1}{2}$  times the expenditures on similar endeavors in Canada ten years ago.

During the course of a study for the Oregon Development Commission, Stanford Research Institute obtained information on development activities from twenty-eight state and territorial development agencies. The staffs of these reporting agencies ranged from 2 to 65 persons with an average agency staff of 9 full-time members. Annual budgets reported by the various agencies ranged from \$20 thousand to \$280 thousand, excluding New York and Pennsylvania whose budgets were characterized by a broader scope of responsibility than most development agencies.

My theme today is applied research for regional development. I would like to mention some of its significant characteristics and then cite what, in my opinion, are some of the requirements for conducting sound regional development research. Then, I would conclude with some thoughts on the future of this field of research.

Before doing so, I would like to clarify my use of the term "region". The definition I offer is this.

A region is a geographical unit most appropriate to your problem.

The need to clarify this term springs from an experience during a recent trip to Canada. To me the term "region" has always meant a large area comprising several states -- for example, the U. S. Pacific Northwest. But when I visited Toronto recently, I called on the Provincial Government's Department of Planning and Development and found that its "regional economic development programme" involved ten economic sub-areas of Ontario!

## Significant Characteristics

Regional development research is a many-sided field. In its broad sense it includes not only economics and production technology but also the problems of social adjustment, education health, etc., which are related to economic growth. There is a tendency, perhaps, to think of regional development research as solely a techno-economic endeavor. When it is realized, however, that a region may or may not grow depending on the nature of its leadership, attitudes, general living and working environment, government philosophy, etc., it becomes clear that sociology, psychology, law and other disciplines may be involved in an analysis of a region's growth prospects.

The many-sidedness of regional development research usually requires a team approach to the problem. In a recent study of one of the U. S. Northwest's Indian tribes, the Stanford Research Institute designated an economist as project leader and a sociologist, a psychologist, a forest products specialist and a geologist as members of the project team. One objective of the research was to determine the attitudes of the tribal members toward disposition of the tribal assets, i.e., the development of these assets as a group endeavor or their distribution among individual tribal members. Another objective was to determine the resource base of the reservation, the development prospects for certain of the resources both from a supply and demand view and to prepare guidelines for use by the timber appraisers who were to survey the tribes's timberlands.

The type of individual selected to lead a regional development project must have certain special characteristics. He should be a generalist rather than a specialist. Competence in his own field of interest is not sufficient to qualify him for regional development research leadership. In addition, he must know when and how to use technically trained researchers as well as those trained in the various social sciences. He must have those qualities of leadership which result in a unified team effort rather than research consisting of a series of unrelated specialized efforts. Both he and his team members must have the ability to adapt readily to new conditions and difficult situations. They must be flexible enough to adapt to unfamiliar working environments instead of attempting to study the problem in terms of their previous environment. Each municipality, province, state, and nation has its own peculiar economic characteristics and it is a mistake for a research man to treat a research problem in an area strange to him as an extension of his home working environment and experience.

The pressure of time may be listed as an additional characteristic of regional development research. A regional development program calls for research and action. Several conditions may exist that make research clients desire quick results: the availability of budgeted funds only for a given period, the development of actual distress in an area and the dependence on research to provide alternative courses of action to relieve the situation, the occurrence of a crisis in tax revenues, or the rugged nature of competition in some industries which places a priority on fast research results.

The variety of research sponsors and project types is another characteristic which the Institute has noted in its regional development research work. Recently, the Institute's Economics Research Division made a partial inventory of its work in regional development research. About 200 projects were studied and some interesting patterns emerged. The greatest volume of effort involved studies of energy in several of its forms -- petroleum, gas, nuclear, solar, coal and hydro. This was followed volume-wise by work on transportation and warehousing, general regional economic growth, plant location, and public facility planning, in that order. The next largest volume category included agriculture and general industrial development studies. The remaining volume consisted of research on community development, resource development, land use, long-range development planning for Indian tribes, water, tourism, population projections and the role and function of research in the development process. About two-thirds of these projects were done

for private clients and one-third for public agencies. The geographical units involved in these projects were highly dispersed. A significant portion of the work surveyed was done in distant countries, for example, the Philippine Islands, Cuba, Israel, Guatemala, India, and Italy.

The survey of our own work in this field illustrates another characteristic of this research, i.e., the tendency for individual applied research projects to deal with topics less broad than the overall economic development of a region. This need for research sponsors to focus attention on a relatively narrow problem has many causes, among which are the limitation of time and funds and the rather specific objectives of many of them. Some of these specific objectives include:

- (1) Increasing employment
- (2) Reducing seasonal or cyclical fluctuations in employment.
- (3) Improving use of land, water, minerals and other resources.
- (4) Spreading the tax load
- (5) Determining the relative competitive position of one region with other regions as a basis for action programs and development effort, and
- (6) Determining the suitability of the area as a location for a specific industry.

#### Requirements for Conducting Sound Research

There are many prerequisites for conducting sound research on a specific region's development problem. Some of the more important are discussed below.

A major need is to formulate the development problem properly. It has been noted that this field of applied research is characterized by the tendency to tackle a specific problem relating to one's particular objectives. The right choice of the specific problem and the determination of the proper scope of research is vital to the success of the research. Such research planning requires knowledge of the over-all problems and prospects for the economic growth of a particular region. This requirement suggests the need to precede any research on specific problems by a preliminary over-all evaluation of the importance of the specific problem both in its regional economic context and in relation to other problems facing the research sponsor.

The nature of a particular problem will determine the delineation of its geographical scope. The scope of a problem at the municipal level does not necessarily have to include a review of the surrounding state or province. On the other hand, it is an illusion for municipalities to think that they can solve all their development problems by restricting their investigation to their political boundaries. States and provinces may have development problems which do not require as much data on their own political areas as information on the market potential in foreign areas. Conversely, states and provinces may have problems which require research on municipalities exclusively. Actually, this is not a black or white comparison. The need during research for information at various geographical levels is more a matter of emphasis on a particular geographical unit as dictated by the problem. The important thing to remember is this: municipal problems should not be overly generalized, and state, provincial or national problems should not be fractionalized into a series of narrowly defined and unrelated projects.

Another important requirement for successful development research is the recognition of what elements make up a region. The development potential of a specific geographical region depends on many factors other than the apparent physical resources which tend to come to mind when we visualize a specific geographical area. Among the factors additional to physical resources



are the availability of leadership, management skills, the nature of attitudes, institutional and cultural values, the legislative and administrative framework provided by government for economic development, etc. These elements or the lack of them may play a more active role in determining the fate of a region than its physical resource base. They demand the attention of researchers as much as the physical elements of a region.

It is extremely important to know the time required to accomplish a regional development objective. Is the solution expected to help meet an immediate need or is it geared to the long-range development of the area? There is a special need today for regions to prepare a comprehensive view of their possible economic future. This need emerges from the increasing acceptance by private industry of the long-range planning concept as a management planning tool. If industry plans in the future for its expenditures on new plants and resource development, it is necessary for the developers and planners for a given region to employ long-range planning techniques to provide the basis for facility and utility planning -- water, energy, transportation, labor force, etc., to accommodate the plants of the future. Such planning will serve to indicate zoning and other regulations for controlling the use of land and the composition of land use.

Closely tied to long-range planning is the important influence of market demand on a region's economic future. Whether a region is seeking to lure factories to it or whether an industrial investor is seeking the best region for establishing a new plant, the location of the demand for the products manufactured or services rendered will be an important influence on the outcome of their respective efforts. On a broader scale, resource development programs involving relatively large geographical areas and involving huge expenditures derive their justification largely from the implicit assumption that long-run economic growth will require the factors or services provided by such programs.

Paradoxically, the importance of markets -- present and future -- as an attraction for industry or as a justification for regional development has been greatly underemphasized in development programs. Sometimes the planners of new industrial enterprises or the planners of development action programs for specific geographical regions become so absorbed by the supply aspects of their problem -- raw materials, available processes, etc. -- that they neglect to give equal careful study to demand for the product. Sometimes, elaborate reports have been prepared often at great expense, in which production flow lines have been carefully laid out and factory costs have been estimated to several decimal places while the basic assumptions about the demand for the product have been dealt with casually if at all by methods likely to be subject to margins of error of hundreds of percent.

Research on the demand, not only of today but the demand of tomorrow, for the product of new manufacturing industries and service industries is a necessity to sound regional development. Many industries use highly specialized equipment which lasts for quite a long time. The investment in such equipment can be amortized only against the proceeds of future markets. From the municipality's point of view also, industries chosen for development should have a prospect of long, continued demand and substantial growth. Research can supply the necessary information. It can analyze future demand and thus aid in the balanced economic development of an area as well as provide a sound base for the expansion of the individual company.

### Outlook

What are some of the things the future holds for regional development research? First, there will be increased study on the question: why do regions grow? The field of regional growth theory is presently an "underdeveloped area" of study. Our universities will devote more time to developing a fuller set of principles of growth and a better framework of

analysis of growth problems. Also, special curricula will be set up to train applied regional development specialists to meet the increased demand for this type of skill.

Second, regional development activities, including a balanced program of research, planning and promotion will become as commonplace at the local level as the fire station and the water department.

Third, plant location research will have to take into account the amenities of location -- climate, good living conditions, community appearance, etc. -- on an ever-increasing scale. This need will be accelerated by the increasing rate of research expenditures and the consequent need for more research and development laboratories. Where the highly technical staffs of these laboratories want to live will be a major determinant of site selection.

Fourth, the development of depressed local areas will require increasing attention. Two examples are (1) the urban-industrial area of chronic unemployment even during periods of national prosperity and (2) the rural low-income areas whose residents attempt to make a living from unproductive land. Additional research, planning and promotion is required to bring these depressed areas back into the mainstream of economic activity where it is feasible to do so.

Fifth and finally, there will be more extensive use made of psychological and sociological research to determine the attitudes and social needs of a region's people so that these attitudes and needs can be incorporated into the development plans. This will apply not only to studies of specific geographic units but also to studies of specific industrial plants and public facilities.

### Conclusion

A final thought I would like to leave with you is this: the successful future growth of your particular region depends on the establishment of a soundly conceived program of action. This program of action must rest on a solid research base and can only be achieved through a thorough understanding of the basic research problems facing your region.



# DEVELOPMENT PLANNING FOR DEPRESSED AREAS:

## A METHODOLOGICAL APPROACH

WALTER STOHR

JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS, MAY, 1964

Reprinted by permission of

THE JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS,  
917 FIFTEENTH STREET, N.W., ROOM 800,  
WASHINGTON, D.C. 20005.

Spatial shifts of economic activity are an inevitable by-product of national economic progress. Depressed areas therefore represent a phenomenon common to practically all countries. Three issues are basic for successful regional development planning: one, the institutional relationship of the planner to the political and executive functions, two, recognition of the interdependence of developed and underdeveloped areas in the context of national policy, and three the use of suitable planning methods. The author analyzes these questions in the light of his experiences in regional planning in Austria, with illustrations drawn from a depressed area along the Iron Curtain.

### Problems and Types of Depressed Areas

Our modern world is one of averages. National averages are published in abundance. They fail to reveal, however, the great variability of the component data. When economic information is collected on a regional basis, significant differences often emerge. In Europe, for example, many sub-national areas have per capita incomes which are less than half of the national average. And productivity gains of leading industries in these areas are frequently no more impressive than those of many underdeveloped countries.' Unfortunately, the problems of depressed areas usually do not right themselves as a result of normal market processes. Conditions are often inadequate for economic development; and out-migration is generally not sufficient to close the gap appreciably between depressed and more advanced regions. The policy problem, therefore, is to find appropriate ways for rationalizing and adapting regional economies in an industrial society where economic potential is typically concentrated in a few key areas or "growth poles."

There are many kinds of underdeveloped regions. The more important categories in Europe are: one, peripheral areas, two, underdeveloped agricultural areas, three, depressed industrial areas, four, depressed mining areas, five, enclosed alpine regions, and -- a special case in some European countries such as my own -- six, depressed areas along the Iron Curtain.



These categories are each characterized by specific sets of problems. In peripheral areas the predominant problem is a locational one: the relatively great distance from major traffic arteries and industrial centers. In other areas, sectoral problems, such as in agriculture, industry, or mining move to the foreground. In the case of depressed areas along the border with Iron Curtain countries, previous functional structures are often cut in half but should be kept intact in order to prepare for the day when normal economic relations will be resumed.

These problem sets -- often overlapping -- are of mainly retrospective interest since they throw light only on the origins and present state of the regional problems.

It would be wrong to make these regional categories the basis for development policy. Regional economic policy will frequently have to cut boldly across convenient categories of regional description. The best way to help a peripheral region, for instance, might be to strengthen existing growth poles and thus encourage further outmigration to the rapidly expanding centers. The only useful basis for action, therefore, lies in a careful analysis of all latent development potentials on a local, regional, and national scale, and in a choice of resource allocation on a comparative basis, weighing both economic and social returns. This must be done through an evaluative process focusing on possible interactions among resource complexes and on the relevant consequences of proposed action programs.

#### Regional Development Planning

Planning for depressed areas requires close collaboration among local, regional, national, and, in some cases, even international bodies. Since economically depressed regions are frequently the result of historical shifts in the location of economic activities which accompanied the process of national economic development, the problems they present must be solved within a national context.

From the standpoint of policy, it is often convenient to distinguish among three types of areas: core regions or growth poles, neutral regions, and development regions.<sup>2</sup> Within the first category, one of the main tasks is the rationing of space among competing uses. This is the traditional concern of physical planning. In the "neutral" areas, a major issue is the direction of future growth to insure optimal social returns. This will generally involve both physical and socio-economic planning. In development regions, the main task is to stimulate social and economic development, to increase its pace, and to expand its scope. A variety of measures affecting transportation, electric energy, water, and other services must be brought together into a viable program in order to raise the region's economic potential. This approach stands in sharp contrast to the more "adaptive" type of planning which tends to predominate in the core regions.<sup>3</sup>

Actions taken in any of these areas will have repercussions in other regions. For instance, the introduction of a natural gas pipeline servicing core areas will change the relative economic growth prospects of development areas by enhancing the competitive advantage of the former. On the other hand, the failure of development areas to attract increased economic activity will tend to increase migration to the core regions. This migration will lead to additional

urban demands for housing and services, while the per capita costs of maintaining the infrastructure within the region of outmigration will rise. Any public action on a national scale will usually have different effects on each of these three regional categories. Each proposed measure should therefore be examined with respect to its total range of regional consequences.

**The Problem of Objectives** Planning is not primarily a technical function but rather a social function. The institutional context of planning is therefore of great importance. Opinions on this question differ widely, but within a democratic context there is almost unanimous agreement that the planner does not have genuine decision-making, much less executive, authority. His function is mainly one of helping to improve the political (and administrative) process by which decisions are formulated.

In this undertaking, it is especially important for the planner's recommendations to be justified carefully and to have a rationale that is ultimately grounded in explicitly formulated value judgments. Thus, a key problem in every planning endeavor is a statement of guiding principles and objectives.

The formulation of such principles has been dealt with in German planning theory under the concept of *Leitbild*.<sup>4</sup> Starting with general Western democratic values including freedom, equality, and security, the proponents of this concept have derived specific principles for regional administrative divisions, the optimal degree of spatial deconcentration, regional economic development, work-residence relationships, and the like.

In connection with a recently prepared development program for the Muhlviertel, a depressed area along the Iron Curtain in Austria, I presented the following statement<sup>5</sup> of guidelines for public policy:

#### 1. Free Choice

This principle is to be abrogated only where it comes into direct conflict with other guidelines.. Accordingly, any development program should be concerned primarily with the framework within which personal or private decisions are made. Its influence will be largely indirect, inducing rather than compelling private initiative in those sectors and locations where the public interest is, presumably, served best. Accordingly, the main objective of a regional development program should be an improvement in the infrastructure -- the basic public services and facilities -- of the area.

#### 2. Equality

The stress here is on equality of opportunity. Specifically, this means that, as far as public policy is concerned, depressed regions should be given a fair chance to make good relative to core regions by means of appropriate capital transfers from the latter. This principle would, for example, cover measures aimed at levelling interregional differences in public services and facilities by channelling additional public funds to depressed areas whose infrastructure was neglected in the past.

3. Securing an Adequate Level of Living

Three criteria are relevant here: one, the creation of sufficient work places within reasonable distance from residence locations; two, the creation of sufficient services, amenities, and educational-cultural institutions within reasonable distance from places of both work and residence; and three, creation of sufficient recreation facilities within reasonable distance from places of residence.

4. Self-sustaining Growth

According to this principle, economic growth in a region ought to be self-supporting; that is, ought not to require long-term sustaining public subsidies. In line with the third principle, then, migration ought to be encouraged where minimum adequate levels of living cannot be supported except by permanent income transfers to the region.

5. Optimum Economy in the Use of Public Funds

This objective stresses overall efficiency in the use of social income. It calls for an evaluation of alternative uses of capital, both short and long-term. Further, it requires the measurement of indirect consequences (costs as well as benefits) of any particular proposal, both inside and outside the planning area.

6. Historic Continuity

This principle, particularly relevant to older countries such as Austria, emphasizes the importance of adapting socioeconomic change to existing historical structures. The emphasis is on continuous order in preference to "quantum jumps." Historical values are accepted as a positive factor in economic development.

The Process of Planning Study

In the remainder of this paper, an approach to development planning for depressed regions will be described as a sequence of stages. These include:

1. Formulation of initial hypotheses
2. Systematic survey of information
3. Evaluation of area development needs
4. Determination of alternative development strategies
5. Preparing action proposals

This outline may indeed be adopted for other types of planning study. But in the following description, examples will be drawn from experience with regional development.

1. Preparatory stage: initial hypotheses. Prior to detailed analysis, it is useful to determine the crucial planning problems of the area in question.<sup>6</sup> This is an important economy measure and may be compared to the task of a scientist who, prior to a series of related experiments, will formulate a suitable research hypothesis for testing. The planner, too, has to ask questions, and if he is new to a problem, he will first have to sketch out its broad dimensions, identifying key variables for subsequent analysis to develop. This initial investigation will be based on readily available statistical and literary information about the area and, to an even greater extent, on interviews with people from the region representing various organized interests as well as with informed government officials. These per-

sonal contacts will be especially helpful in identifying acutely perceived problems, possible goal conflicts, and various points of view with regard to desired public action. This information will be helpful later on in formulating an appropriate research design and in bringing the main questions for study into focus.

At the conclusion of this stage, it is particularly helpful if a preliminary political decision can be reached on one of the possible development strategies for the area, so as to obviate the need for a complete assessment of a wide range of alternatives for action. Such a decision would tell the planning analyst whether he should be thinking primarily in terms of building up the area (large capital transfers to the region) or of an orderly downward transition to less intensive uses coupled with extensive outmigration to core regions. A range of development alternatives will be described below. The main difficulty with reaching such a decision lies in the inability of the responsible authorities to judge development alternatives at this early stage purely on the basis of general principles without knowing in detail the socio-economic and physical consequences that would ensue from such a choice. Nevertheless, if a narrowing of alternatives can occur at this point, it certainly helps to keep down the time and cost required for working out a set of meaningful program recommendations.

2. Systematic survey of information. Once suitable working hypotheses have been formulated, the main task of data collection and analysis can begin. Specific problems to be investigated may include migrant labor, seasonal and structural unemployment, deterioration and depletion of physical resources, industrial structure of the area and its development, sociological obstacles to community change, inadequate provision of central services, and so forth. Some of the problems, such as lack of social adaptability or an inefficient hierarchy of central places, may not be immediately apparent. The local population may be so accustomed to structural inadequacies of this type that it will fail to relate them causally to more visible economic problems, such as a lack of jobs.

The topics to be covered by the survey, weighted according to the specific problems of the area, will include:

1. social characteristics (population, labor market, migration, commuting);
2. central places (hierarchy of trade centers and their spheres of influence);
3. economic activities (agriculture, mining and industry, crafts, trades and services, tourism, and external trade); and
4. infrastructure (transport and communications, water supply and waste disposal, electric power, housing, education).



If the necessary data are available, an important part of the analysis will also be concerned with the structure of regional income.

Since the purpose of the analysis is to come up with specific program recommendations, the survey must be organized to yield results that will serve this purpose in an efficient way. Planning surveys differ from other forms of regional study in that they will be chiefly concerned with an analysis of:

1. recent trends and the present state of the regional economy;
2. relation of the present state to proposed levels of adequacy;
3. foreseeable trends, both within and outside the region;
4. recently accomplished or planned investments in particular sectors; and
5. existing conceptions of future long-range developments (sectoral development goals).

Further, all data will have to be assessed for their probability value. This will include an evaluation of statistical error in the basic data and the accuracy of projections, including the degree of their contingency on exogenous variables such as national development trends or political changes.

The required detail and exactness, as well as the amount of data required, will usually depend on the complexity of the problems to be treated, but often will also hinge on the probable divergence of popular views on specific questions. Especially contentious points will have to be backed up with particularly detailed information in order to facilitate agreement on reasonably objective grounds.

3. Evaluation of development needs. While the preceding planning stage was chiefly an analytical one, the next is predominantly a synthesis. Data which have been collected are now correlated with each other so as to yield an immediate basis for program planning. The concern is, on the one hand, with development targets, and, on the other, with regional capabilities for meeting them.

With the broad goals for regional development established -- the leitbild previously referred to -- the question that must now be answered is related to the specific development objectives to be reached over a specified period of time. These may be expressed both in terms of aggregate economic indices such as income growth and employment,<sup>7</sup> or in material values such as levels of health and education and standards of infrastructure (water, sewage, transportation, electric power). Once these have been calculated, the region's capabilities must be assessed for achieving the projected levels. Growth possibilities of leading industries must be assessed and the region's natural resources closely examined for their potential economic contribution.

In connection with these studies, it will be useful to carry out a detailed analysis of the locational

attractions of the region for specific types of industry. In combination with a knowledge of the main locational requirements of economic activities, it may be possible to propose a range of industries which appear to be particularly well suited to the conditions of a given area. From this screening of locational factors, together with an evaluation of market possibilities, an estimate of micro-economic development possibilities can be obtained. Sectoral development alternatives can then be formulated, starting with the micro-view and proceeding to more aggregate data, such as regional income and its composition.

#### 4. Determination of alternative development strategies.

According to a widely shared view, it is the planner's responsibility to offer a range of alternative courses of action for political choice. For each strategy, there will have to be a set of economic (sectoral) and spatial goals, the latter referring primarily to the distribution of regional centers and their functions, the location of the main arteries, the pattern of agricultural and recreational areas, and so forth. The two aspects of economic and spatial structure are closely interwoven. If the stress in future development is to be on industrial expansion, for instance, the development will occur mainly in a small number of localities; agricultural development would spread more evenly across a wider area.

#### **A Depressed Area in Austria**

In order to make these points more explicit, they will be illustrated with examples drawn from a development program for the Muhlviertel area in Austria.

The sectoral analysis of potential development factors showed that new industrial enterprises would have to play a key role in the development of this region. Agriculture was unable to furnish either additional jobs or substantially increased income. Rural incomes could be raised only by providing additional off-farm opportunities in manufacturing or tourism. Detailed proof of the feasibility of this solution turned out to be a major factor in the acceptance of the final program by local farming interests.

The development of tourist trade appeared to offer particularly significant opportunities on account of the natural beauty and restful quality of the area, existing medicinal baths, and the proximity, on the perimeter of the region, of the rapidly growing industrial center of Linz, the provincial capital. Analysis showed, however, that the effect of tourist development would be mainly an increase of income in already existing employment rather than the creation of new jobs.

The demand for new jobs amounted to about one-third of the existing employment in the region, but new employment would come into existence only if additional manufacturing industries could be attracted to the area. Since new industries could be expected to locate in only a limited number of places where



# RE 1. Development Alternatives for Mühlviertel Region, Austria

rectangles indicate distribution of additional  
infirm jobs. Demographic consequences of  
proposed economic development:

- Population stabilized to increasing
- Population slightly decreasing
- Population strongly decreasing

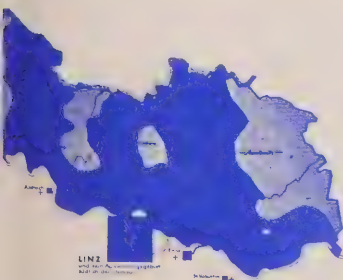
## Alternative I. Development Concentrated in Linz



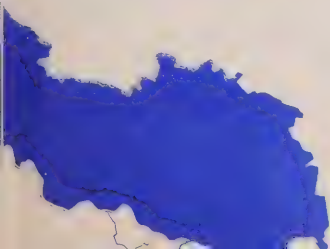
## Alternative II. Centralized Development Near Linz



## Alternative III. Economic Growth in Strategic Regional Centers



## Alternative IV. Maximum Decentralization of Jobs



the conditions of infrastructure were generally favorable, the choice of these locations proved to be a matter of critical importance in determining the future spatial structure of the region. The identification of "growing points" was thus the main criterion for distinguishing among alternative spatial arrangements for the region.

Four alternative goals for spatial structure were worked out and compared in terms of identical categories (See Figure 1). Moreover, for each structural goal, a different development policy would have to be employed.

Alternative I proposed a further concentration of economic development on the adjacent industrial city of Linz. It reflected the historical tendency of development over the last several decades and presumably would come about even without a specific development program. One effect of this strategy would be the continued stagnation or decline of practically all areas outside the metropolitan area of Linz. Although this alternative would be the least costly in terms of public outlays, it would also be accompanied by many adverse social consequences, not the least of which would be a loss of the historical character or identity of the region.

Alternative IV, at the opposite extreme, proposed a maximum dispersal of economic development within the planning area, so that jobs could be offered in adequate volume within a maximum of one hour's commuting distance from existing places of residence. From a social standpoint, this would undoubtedly be the ideal solution, but its realization would require heavy and continued subsidies of economic firms in the region.

Alternative II was projected on the basis of the estimated consequences of a policy which would channel aid directly to productive sectors in the form of public credits and reduction of taxes, without consideration for their effects on economic and regional structures. This kind of development aid had, for a number of years, been extended to this and other regions. On the whole, however, it had tended to reinforce rather than alleviate existing structural problems. In its actual effects, this alternative would differ from the first only in degree, not kind, providing a few more jobs within the planning area and extending the dynamic influence of Linz somewhat deeper into the region. It would also reduce the total volume of commuting within the area which was already strongly oriented to the Linz economy and, in addition, it would strengthen a few minor nodes outside the immediate metropolitan region. The problems of the remaining parts, however, would remain virtually unsolved.



FIGURE 2. *Development Plan for the Mühlviertel*

The plan adopted for this region, based on Alternative III of Figure 1, emphasizes industrial development and tourism. Triangles indicate locations of new industry; circles represent tourist attractions and facilities. The shaded central area is the recreation region for Linz, with heavy week-end use anticipated. Areas of horizontal shading have poor accessibility and low potential for urban development. Czechoslovakia borders this region on the north.



Alternative III proposed the promotion of selected "growing points" throughout the region. The identification of these centers took place after considering existing and potential location factors. This alternative chiefly stressed the improvement of infrastructure in the selected centers, so as to enhance their competitive ability in attracting venture capital. This initial stimulus, it was hoped, would eventually bring about a type of economic structure in the region whose further evolution would not only be self-sustaining but also fairly independent of the economic fortunes of Linz. The concentration of industries at a number of selected places would facilitate the spread and intensification of tourism and, within their region of influence, would exert a controlling influence on shifts in the agricultural sector. As an integral feature of this alternative, those parts of the region which appeared to lack strong competitive conditions for industry but excelled in scenic qualities were designated as a potential national park.

In view of the guiding principles set down, Alternative III appeared to be best suited for the future development of the region. With only limited public spending, it would create a self-sustaining regional economy with adequate incomes for the people of the region and tolerable commuting distances. Emigration from the region would be held to the expected natural increase of the population.

For convenient comparison of their consequences, these four alternatives were schematically arranged, as shown below:

	I	<u>Alternative</u>	
		II	III IV
General characteristics of the proposal			

Consequences for:

- Labor market (job availability)
- Commuting
- Change in total population
- Selectivity of Migration
- Abandonment of farm houses
- Maintenance of central services
- Development of:
  - Agriculture
  - Manufacturing industry
  - Local trades and services
  - Tourism

Requirements and consequences for different types of infrastructure:

- Roads
- Means of public conveyance
- Transport subsidies
- Communications
- Water supply and waste disposal
- Electric power supply
- Housing
- Education
- Other public services

On the basis of the materials presented, Alternative III was selected by the public authorities as the basis for the future development of the Muhlviertel. Detailed goals were then formulated for all subareas of the region, as well as for specific economic sectors, within the context of a general development plan. This plan is summarized in graphic form in Figure 2, shown on the following page.

5 Preparing action proposals. In order to make significant progress toward the development goals, it is finally necessary to formulate precise measures for action. Carefully weighed, with assigned priorities and performance standards, these measures constitute the development program. Four separate aspects of such a program deserve to be mentioned.

a. Organizational measures In this category belong all recommendations concerning the institutions, some to be newly created, which are to carry out the program; procedural matters, such as methods for program coordination where several public bodies are involved; and legal provisions necessary to realize the overall development proposals.

b. Recommended public investment programs These will be concerned chiefly with investments in infrastructure. Particular importance is attached to the order of priority and sequence of investments in line with the development goals to be achieved.

c. Inducements to private action These will include such financial assistance as public subsidies, credit policy, and tax relief measures. Such measures represent clear interference with the normal allocation process, and should be used as sparingly as possible. In general, it is preferable to compensate for only initial disadvantages in regional economic structure by attacking root causes of backwardness through the development of public services and facilities.

d. Project planning This constitutes the final step in designing a regional development program. For maximum effectiveness, investment projects must be drawn up within the context of an overall regional policy, as described above. The pay-off of a regional program is the right kind of project, in the right place, at the right time. Only a total planning process can yield such a solution.

## Conclusions

In this paper, a practical approach to depressed area planning has been stressed. If it can make claim to any innovation, this will principally be found in two areas. First, it has been shown that economic (sectoral) goals for regional development must be evaluated jointly with spatial goals. The regional planner can make his unique contribution here, as opposed to the economist who would normally consider only the first of these two basic sets of goals. Where development is to occur is as important as what type of development is most suitable for a given area. Important socio-economic consequences will flow from different spatial allocations of investment resources. The principal alternatives, ranging from complete and even dispersal to extreme concentration, have been identified and briefly discussed. It should be noted that these alternatives are capable of application in a large variety of circumstances, including on a national scale.

The second "innovation" lies in the importance attached to a systematic approach to developmental planning. This approach consists of a logical process of goal reduction in which the planner proceeds from general value premises (freedom, equality, security) to specific guiding principles, objectives, preliminary hypotheses, problem analysis, development strategy, program, and project design. These are not necessarily arranged in a fixed sequence. A good deal of overlap, feedback, and revision automatically take place. Thus, in the course of analysis, early hypotheses may have to be redefined, details of programs may come to depend on specific projects and project sequences, development strategy may have to be reviewed in terms of changed objectives, and so forth. What is important, however, is that the process of goal reduction must be both orderly and logical. No effort should be spared to link every stage in the planning study process to preceding and subsequent stages.

Value judgments, however, remain of critical importance in this process. They are the keystones in the total edifice. Since consensus on these judgments will generally be lacking, it is essential that all major value considerations be stated explicitly. In the absence of appropriate political guidance in this matter, it is further essential to evaluate a number of leading value premises alternatively for their specific consequences.

A final word of caution is in order. Not all depressed regions are alike. Although the formal process of planning study can be applied to all areas with equal success, the substance of planning proposals will of necessity differ from region to region. A universal solution to the problem of regional poverty and economic backwardness does not exist.<sup>9</sup>



<sup>1</sup>For comparative data on regional economic development in Europe, see United Nations Economic Commission for Europe, *Economic Survey of Europe* in 1954 (Geneva, 1955), chap. vi.

<sup>2</sup>Norbert Ley, "Ziele der Landesplanung in Nordrhein-Westfalen" (Objectives of Regional Planning in Nordrhein-Westfalen), *Stadtplanung, Landesplanung, Raumordnung, Vorträge und Berichte*, ed. Landesgruppe Nordrhein-Westfalen der Deutschen Akademie für Städtebau und Landesplanung (Kohn, 1962), pp. 17ff.

<sup>3</sup>John Friedmann, "Regional Development in Post-Industrial Society," this issue, pp. 84-90.

<sup>4</sup>Die Raumordnung in der Bundesrepublik Deutschland (Regional Planning in the German Federal Republic), (Stuttgart, 1961), pp. 52ff. See also Erich Dittich, "Zum Begriff des 'Leitbildes' in der Diskussion über Raumordnung" ("Concerning the Concept of 'Leitbild' in Regional Planning"), *Information des Instituts für Raumforschung*, VIII (Bad Godesberg, 1958), pp. 1 ff.

<sup>5</sup>Entwicklungsprogramm Muhlviertel: Vorschläge für den Wirtschaftsausbau (Development Program Muhlviertel: Proposals for Economic Development) (Vienna: Österreichisches Institut für Raumplanung, No. 16; 1961).

<sup>6</sup>E. A. Powdrill, *Vocabulary of Land Planning* (London: The Estates Gazette, Ltd., n.d.), p. 15. Also: Wolfgang Jungwirth, "Öffentliche Verwaltung und Regionalplanung" ("Public Administration and Regional Planning"), *Berichte zur Landesforschung und Landesplanung* (Vienna), IV (1960), pp. 97 ff.

<sup>7</sup>The need for additional jobs is best measured by comparing individual income with national standards. In default of such data, physical welfare criteria may have to be used and translated back into employment equivalents. See Walter Stohr, *Probleme des Wirtschaftsaubaues in Entwicklungsgebieten* (Problems of Economic Development in Depressed Areas) (Doctoral dissertation, University of Vienna School of Economics, 1963), p. 3.

<sup>8</sup>A more detailed treatment of industrial location planning has been attempted by the author in "Methode der Erstellung von regionalen Industrie-Entwicklungsprogrammen" ("Methods for the Design of Regional Programs for Industrial Development"), *Berichte zur Landesforschung und Landesplanung* (Vienna, forthcoming).

<sup>9</sup>The American reader may find the following two publications of special interest: Charles M. Tiebout, *The Community Economic Base Study* (Committee for Economic Development, Supplementary Paper No. 16, December 1962); Harvey S. Perloff and Vera W. Dodds, *How a Region Grows* (Committee for Economic Development, Supplementary Paper No. 17 March 1963).

**PART FOUR**

**THE INTERACTION BETWEEN ECONOMIC DEVELOPMENT**

**AND**

**REGIONAL ENVIRONMENT**



## THE NEED FOR AN IDEAL

STEWART BATES

COMMUNITY PLANNING REVIEW, DEC., 1955,

Reprinted by permission of the

COMMUNITY PLANNING ASSOCIATION OF CANADA,  
425 GLOUCESTER STREET,  
OTTAWA 4, CANADA.

You have suggested that I talk to you on "The Need for an Ideal". This is no easy assignment. In any subject, it is not easy to find the ideal, and still less to express it, as the modern world seems to ask, in some simple slogan. Even for life itself it appears difficult to find an ideal -- or at least one on which we are all agreed. No heroic race would shrink from grief and woes, were it only assigned a noble task. But nature prescribes no tasks. She calls for no volunteers. She points willing climbers to no Everest. The discovery of the goal -- the most difficult of tasks -- she leaves to us. No road signs are erected by her. You choose your own path, uncounselled, at your own risk. Life is a unique experience, not to be purchased even with money. Yet, with this pearl of price, we know not what to do.

The search for life's ideal has exercised many men at many times and in many places. To find an ideal for town planners may appear much less difficult. But this will depend on how you define the subject itself. If the definition is made narrow enough, or if we think only of some part, like traffic management, no doubt an ideal can fairly readily be found. But the subject merits no narrow definition. I am going to frame it widely, and as an ideal I am not offering you a design. The purpose of town planning is no less than the achievement of a workable and inspiring setting for life itself: that is what I am going to suggest.

Two relations have always interested men, the relation between man and nature, and the relation between man and society. The latter relation still vexes us politically because of the inherently opposite processes in man on the one side and society on the other. Neither man nor society can live without each other: It is an unending marriage. Yet there remains an endless flux between the individual's need and feelings for freedom, and society's need for collective actions and responsibilities. And this age-long argument reflects itself within the modern city, whether that city be Tokyo, London or Toronto. Man adjusts himself to the city and at the same time tries to adjust the city to his purposes. The city itself is the instrument through which these adjustments of man to society are well or ill made, as the case may be.



The growth of a city has the same opposite processes going on. It reflects the search for individual freedoms on the one side and the imposition of conforming actions and manners on the other. It is clear that this is not easily planned, in any overall sense. We have abandoned the term "planning" in most of the social sciences. Perhaps the term has unfortunate overtones in the public discussions of town planning. It makes the process sound too simple or too bureaucratic.

In part you are bureaucrats, committed to the daily task of moulding things into standard and uniform patterns. But in part also you are designers and humanists trying to release people from the tedium of the mass-produced city. These aims are no more in conflict than are sleeping and waking. Your codes and standards cannot remain dormant or they will add to the sterility. You are doers of daily things, but also thinkers of future things, moulders also of things to come.

The city, as a concept, should not be over-simplified. It is a social complex -- out of geography, economics and history, containing within it the decisions of nature herself and those of myriads of men, many long gone and many of nationalities other than our own. It is certainly a rich complex. If we look at the modern city as outside observers, as superior spectators, we must admit that the city, seen from the stalls, makes a fine play. The theatre is an imposing edifice with its high towers, its many splendours, its great varieties. The scenery is excellent, the plot is intriguing and full of incident, the characters numerous and charmingly varied, the acting wonderfully realistic and convincing. To disapprove of the modern city as a spectacle is to be hypercritical, although one admits that the spectacle excites both wonder and disgust. As a passing show it leaves little to be desired and is probably as well worth seeing as any other staged in the Universe, either now, or in the recent or remote past.

We are, of course, not always observers. We are not looking at it through an opera glass. We are doers and sufferers on the stage itself, and there we feel its tensions more keenly, sometimes even sharing its delirium. Often it appears a smoking whirlpool where there is small standing room for logic. In this cataract, in this bewildering commotion, our mortal minds are a little aghast. And if you, for any moment, allow humanitarian ideas to enter the mind, the city immediately shows another aspect: a hateful scene of vice and violence.

Human thought trying to envisage such a miracle has an inherent weakness. The thing is too variable, too dynamic, too infinite in its aspects to be easily comprehended. Unless these features can be pigeonholed and docketed into parts of the whole, we cannot truly grasp it, and so we resort to talk of occupations, habitations, recreation and transportation, as if the total of these made up the city.

Please do not ask me to give a unified vision of the city that the city itself will not provide. It provides disunion, separateness, multiplicity, incessant change -- a kind of chaos with everything at odds, one energy against another, growth against decay, men against men. It is indeed tempting to over-simplify this kind of organism -- not made with the marvellous hand of nature but only with the apprentice hand of man.

This social complex cannot be idealised in a single notion. Despite the armchair philosophers, the relations of the One and the Many are not so simply drawn. You cannot think of the modern city as if it were an enlarged copy of an English Village. Its mere size creates new kinds of opposites in wealth and poverty, virtues and vices, freedoms and frustrations. Before I sit down surrounded by the good books on this subject, to read the attractive essays on aesthetics, I am sure I should walk abroad more through the cities and accommodate myself to their bewildering variety. How pale some of these book drawings appear beside the passions and intrigues, the hatreds and ambitions, the glitter, the

pageantry and poverty of the vast city. The books seem to avoid some of this; indeed, they seem to prefer the lukewarm emotions. The model cities have a preference for the decencies -- perhaps even a preference for the tepid.

Probably before being committed to any theory, we should, after the manner of the artist, make some preliminary studies. Perhaps get views on town planning from angry souls in underground dwellings, from the cynics, from those who have to undergo the risks of driving after a night of roistering and carousing, from those who like quarrelling and gambling. Perhaps if one wishes to know the city, one should enquire into its luxuries and frivolities. Where the heart is, there the money goes.

Clearly, there are many aspects of city life to be considered. I mean that cities -- their temples and cathedrals, statues and factories -- have not all been built by saints. The rough riders have had a hand in it too. The city is a social complex to be seen through many eyes.

But if that were not enough, the scene refuses to stay still long enough to be photographed by these many eyes.

The city is never at rest. Like the sea, it is untamed, moody and capricious, and contains many forms of danger to body and soul, and many forms of death to body and soul. Like the sea, the city can lay a spell on you. It too has its sheltered lagoons and quiet havens. It is in eternal flux, filled with ceaseless hostilities and ill-made compromises. Within it, the lovely has no priority over the vile, nor wisdom much advantage over folly. The most compelling feature of all this complex is that it lives. To alter it, to shape its history, to help direct its many undertakings, is difficult.

The city is a heritage which no generation has a right to exploit. It has to be restored, re-created, refashioned for present and future enjoyments. And your profession has a hand in the game.

The perfectibility of the city is not too difficult to imagine. Miracles, once the province of the Church, are now performed by the State. We can be sanguine enough to believe that the State (Federal, Provincial, Municipal), can perform a new miracle on the cities. But what miracle? The new Garden of Eden will be decent, safe and sanitary. There will be good roads and lots of parking places wherever you stop. Water, sewage disposal, sanitation, humane slaughtering will all be adequate. There will be unstinted soft drinks, both on television and in the shopping centres, and the best of school buildings, free concerts and libraries. The materials are easily put together. But will there be far horizons and invincible hopes? Men, in all times and places have had thoughts beyond this materialist kind of Utopia -- thoughts that wander through eternity to projects unattainable in time. The world's griefs are not just economic.

It is fairly easy to see how to fill the world's empty stomachs. But consider the more intricate problem: the filling of empty hearts.

Can we think of our cities in such terms? Or are we indeed so reformed that we see men sitting for ever at their bungalow doors, festooned with honeysuckle, with the refrigerator filled with beef and beer? Such an orderly world is not to everyone's mind. Some would prefer a disorderly world as vastly more interesting. The last and greatest insult one can offer the human race is to regard it as a herd of cattle to be driven to your selected pasture.

Must we look forward to wholly conventional living in our North American cities -- lives all alike, like a colony of ants, in standardised buildings, standardised subdivisions -- places where all men think the same thoughts and pursue the same ends? This is the kind of ideal that seems to prevail among us -- governments, builders and planners. This is

the sort of environment we seem to want for ourselves and our children. If environment has any influence on character (and you had better agree with me that it has, or your profession becomes pointless or no more than a mere engineering operation), the one we seem to be providing has severe limitations. It seems aimed at diminishing the individual. These subdivisions look like a calculated attempt to imprison the human, to force him into a mould that you or we or some builder or some architect thinks good. I have enough faith in the human spirit to believe that on this rock of regimentation, of standardised existence, the poorer plans will eventually shipwreck. There is a rebel in every man. Sooner or later, the individual and the nation have in the past refused to surrender themselves to a dictated felicity, to satisfactions chosen for them. There is, happily, in mankind a broad range of vision, a passion for ideas and ideals far removed from the immediate surroundings. As well as this vision there is happily too, a natural love of the lovely. And these two gifts are always ready to prevail.

It is these simple things that give point and purpose to your profession. If you help produce a good environment, men will recognize it, admire it, want it, and will ask you to produce more. These two basic qualities -- men's range of vision and the love of the lovely -- are always there, waiting to be satisfied, waiting to be stimulated. By birth, men are in some part artists and fashioners of worlds. It is this very romance of life that presents you with the golden chance. The environment of our cities, however great the spectacle, becomes more and more dehumanized, depersonalized.

The cities and the suburbs more and more seem to show a lack of vision, an unawareness of the lovely, an air of having given up the struggle for the best. The cities of the Western world reveal the malady of our times -- the malady that little seems worth attempting, the attitude of "I couldn't care less".

We are all creatures of our time and country. Each of us would be a different kind of individual had we, with the same minds and bodies, lived a thousand years ago. In our time, however, we have seen empires dismembered and destroyed. We have witnessed the collapse of ancient monarchies, the flight of kings. New Caesars have come and gone. We have seen materialize out of the unintelligible books of a scholar named Marx an idea that rent the world.

Of perhaps more significant, and alongside all these, we, in our time, have seen the final emergence of a new religion. We now present ourselves at the Vatican of Science and it promises a hell-fire here on earth that surpasses the hereafter vouchsafed for sinners only by the mediaeval church. But the new religion does not satisfy. Has it anything to say about justice and injustice, about the beginning or end of things; anything to say about the destiny of the human race, about ethics or conduct, about international relations; anything about human will, about love and hate, and revenge? The Vatican of Science is surprisingly silent on all these.

Is it any wonder that our world suffers disenchantment, that the divine arts are partially subdued by disillusionment, that our times express a weakening of thoughts and feelings, our structures and ways a decline of humanization?

This phase will shortly end, as it has before, and a springtime of enthusiasm will refresh us again. People will get bored with disillusionment. They will realise that integration takes more intelligence than analysis, and that we have to spend more time again on the former than on the latter. They will not continue to let their brains go to their heads. Thoughts and emotions will again have a place; they will be condensed and made effective again, and hope will spread. In your field you have had, for example, Gropius. That wild swan, the human soul, has revealed through him a new faith, a new set of tendencies in our time, a new

emphasis on the positive values of life, a new sympathy with man and nature. And he is not alone. This kind of work is the struggle for the best. But even more important, it is not an ideal on paper. It is being achieved. You can be confident that human nature is such, in its vision and in its loves, that it will quickly recognize the improvement you make. Men, and much more so, women, constantly dream and plan how to improve their surroundings. They need help, and the time is as ripe for you as it was for Marx in a different way.

It is ripe for the humanization of the cities and the suburbs.

Major achievements are awaited from you. On rare moments in human history, men have felt a breath of summer air. Life has seemed full of zest, overflowing with exuberance: men seemed ready to welcome all company and every undertaking with huge delight: they pushed their fortunes, took risks and acted with conviction. This time will come again. Our modern, highly ordered environment, its standards and its ways, fail to encourage such verve and such spirit. Perhaps you have a major social responsibility to help change this. Nothing has been accomplished by resignation, by the willingness to put up with anything.

If you hold states, civilizations, arts and sciences worth the building, your profession has to enter the field of battle, and be prepared to add something new to the capitalized experience of the generations that have gone before us.

You will make errors, but you will work wonders. You will fight the tedium, the ugliness, the narrowness, the commonplace business approach. In short, you will recreate a humanization of the cities and the suburbs. That is your contribution to the great experiment of existence; that is your duty, to see that this experiment continues, and on a new and grander scale. For success, governments, people, firms have to be convinced that the end, and the means you find towards it, are worthwhile: and they will be convinced, as each success you have finds its quick admirers.

This puts a high responsibility on planners. You appreciate that I think of you not as mere engineers, mere architects, mere social workers. You are and must be, a team of all these, but you must be more.

"You cannot make war with a map", said Chatham.

You cannot make town plans with a design either. Your purpose is no less than the achievement of a workable and inspiring setting for life itself, for all its infinite variety. "We must not obey", said Aristotle, "those who urge us, because we are human and mortal, to think human and mortal thoughts; in so far as we may we should practise immortality, and omit no effort to live in accordance with the best that is in us." In short, I expect you to so help alter the setting of the second half of this century that we may seem as interesting to the gods as they are to us.

In thinking of your daily practice, perhaps of the sub-division that you have to plan tomorrow, these remarks may be less than helpful. They are a reminder, though, that your profession has to be one of high endeavour. The subdivisions, the bungalows, the streets last for a long time, far longer than most articles in current production. Your profession therefore has a responsibility for looking farther ahead than most. Mankind differs from the rest of God's creatures in that he frequently works for a future he will not see. This requires faith and hope on his part, and charity on the part of the next generation -- faith and the hope that you can produce something that will look



worthy fifty years from now, and charity from our successors when they appreciate our efforts to serve their unknowable ends.

This is obviously more than a matter of patterns of streets and the like: these designs are the final instruments through which the ends are achieved, and these instruments should emanate from the elementals themselves. Good town planning is not simply a matter of brainwork: it is essentially one of thought and feeling, suffused with the love of humanity and the love of freedom.

I agree that it is difficult to plan a single subdivision with such thoughts in mind. It would be more satisfying to plan a new town or replan the whole centre of a city with such long-range thoughts. True, and public opinion has to learn that this is so. Then you will get the chance to do the larger projects, to infuse them with humanism and to leave a better, more hopeful heritage.

This does not mean that the small subdivision is not worth treating with high seriousness. It is. You are the doctor diagnosing the individual case and making your prescription for the town councils or other elected persons. That prescription must not come from a partial diagnosis only; the health of the whole man has always to be considered. The partial pattern of a town has to be seen with the whole, not only for today but into the future. The abbe who tended the famous pictures in the Vatican for fifty years, and who had seen his friends and acquaintances one by one leave this life, reflected that the Michelangelo paintings were after all, the real substances, and we were but the shadows. Your profession has a work of some substance ahead of you!

## OBSERVATIONS ON CANADIAN CITIES

E. T. RASHLEIGH

PLAN CANADA, VOL. 3, NO. 2, 1962

Republished by permission of

THE TOWN PLANNING INSTITUTE OF CANADA  
BOARD OF TRADE BUILDING  
11 ADELAIDE STREET WEST  
TORONTO 1, ONTARIO

Over the past ten years, any planner working in Canada has been kept constantly aware of the rapid pace of urban growth, particularly in the larger centres. Everyone takes for granted that this growth will continue to typify the expansion of the country, and no one, to be more specific, seemed to question the validity of the 1980 predictions made by the Royal Commission on Canada's Economic Prospects five years ago. What was surprising was, that if no one questioned the prospect of feverish urban growth over the next 25 years, few seemed very concerned about it. Yet it was my impression, as a working planner, that the larger metropolitan centres which were expected to more than double their populations in 30 years, had not, so far, demonstrated any remarkable prowess in city building, and had ignored several fundamental problems which would become critical as the rapid urban build-up continued. After well over a decade of post-war building, the most we could point to were isolated successes across the country: a good neighbourhood subdivision here, an inoffensive highway approach to the city there, a block of slum clearance somewhere else.

Until recently, much of this was supposition based on the author's own experience in Toronto and hasty or second-hand impressions of other cities. Over the past two years, however, the writer has spent time in most of the metropolitan centres in the country, becoming familiar with their layout while keeping in mind the future forecast for them. This paper is, in large part, a product of this tour. It is a critical commentary on what is on the ground today, not so much in any city in particular as in the larger cities generally. The author must apologize beforehand because most of the observations will be familiar ones, and many have already been set down in one publication or another. Perhaps, though, it is worthwhile reaffirming, on the basis of a personal survey, that certain characteristic failings of Canadian urban growth still persist.

### THE VITAL CORE

It would be wrong to describe the typical form of growth exhibited by the central commercial cores of Canadian cities, without first recognizing that they differ from each other in many respects. By this I refer not only to such obvious qualities as the old world charm of Quebec and the maritime orientation of some cities, but to the fact, for example, that Quebec and Ottawa have developed two cores instead of the customary one, each with a different function; that the

core of Regina displays an emphasis on serving not just the city, but the surrounding farm population, whereas Windsor has a relatively small downtown core because Detroit lies just across the river, and because another section of Windsor, once a separate municipality, still maintains a flourishing shopping district; and, of course, that each core reflects the character of its original townsite layout.

### The Typical Pattern

Nevertheless, one can generalize to a considerable extent on the manner in which all cores are growing at the present time. The traditional hear of downtown still prevails in most cities as a hard core of better retail outlets extending for several blocks along a street that connects directly with the main roads out of town. The less-than-best outlets try to get as close to this centre of gravity-on the same street if possible, or on other main intersecting streets. Thus, the retail area acquires a strip or vertebrae shape. When it grows, it tends to be attracted by the main arteries more than any other single factor. But the medium sized cities of Canada cannot sustain a hard retail core much more than four or five blocks long without low-rent, low-density gaps appearing, and it is also apparent that a core will stretch only so far along the main street before it loses its "down town" quality. However, because there are so many streets on which the core may deepen, the small businessman does not like the gamble of locating on a side street or losing a direct connection with the existing retail core, so premium retail development does not usually occur behind the main street unless there is large office building, parking garage or big store to establish the pattern. The usual deepening process starts on the side streets crossing the heart of the core, which build up until the back street, running parallel to the old main and between these streets, can be built up. This second main street is a fairly recent feature of core development. Edmonton and Calgary have one that built up in the typical piece-meal fashion, while the Wellington Square enclosed mall in London is a deliberate attempt to deepen the core en bloc.

Around the hard core are other functional segments of downtown. Specialty stores must be near the heart of the core. But in trying to locate cheap space they help give a new direction to retail expansion. The cheap outlets may locate anywhere on the periphery, or out along a main street, but they also may congregate - in the retail core of a bygone era, as a skid-row near the railroad station, and so on. Cities with a farmers' market, like London, Windsor and Ottawa, have a special retail dimension to one side of the main street: regrettably, this element has almost disappeared in Hamilton and will probably be removed in Windsor. Most cores contain groups of related business, such as wholesalers, banking and insurance companies; this tendency to congregate has been repeated in recent years with the building up of prestige office streets, although rather than establish a completely new pattern, they tend to capitalize upon an existing, well laid out and attractively landscaped street. A prominent exception to this is the complex of new oil company office buildings in Calgary, which is several blocks removed from the old core: here the transformation has been so rapid that a 19-storey building virtually rubs shoulders with a 2-storey frame house. In many cities the retail core has acquired, in recent years, a sprawling backside of parking lots and other automobile services so that it stands isolated in a no-man's land of asphalt, the inevitable result, under present circumstances, when large cities have a high incidence of automobiles.

### Influences and Inadequacies

Having generalized on the pattern of the core, I now turn to the effect of this pattern. By and large, most cores possess cacophony and at the same time monotony, a relentless regularity in plan and a chaos in elevation, an anemia of content and a chronic lack of intentional

emphasis. Where this description does not apply, it usually means that the major factors which shape the core have been offset. These are: a rigid adherence to the past, a jealous retention of property rights, and an absence of a unifying hand.

Literally underlying every development is the pattern of streets and individually owned parcels of land, which were designed in a different era for a completely different purpose. These remain, extremely resistant to either modification or reorganization. The grid street system creates the overall mold of uniform blocks. Narrow lots break the blocks up into small parcels which were laid out with no appreciation of the fact that retail operations require a different layout from residential properties. So stores and office buildings have long since had to make maximum use of the land, leaving the task of circulation wholly to the public rights-of-way. Efforts to improve traffic conditions immediately run into both the expense of acquiring intensively built-up frontage, and the difficulties of changing traffic flows when nearly every street constitutes the only access to a block of properties. The pattern is equally hard for new private construction to break. The assembly of a parcel of adjoining properties is so difficult that instead a patchy, jagged-tooth facade builds up; even where assembly has been possible, the new development is still designed as a two-dimensional facade, because it is so much more difficult to assemble a parcel running through the block between streets. Thus, the old format is reaffirmed and the old errors duplicated at higher densities. Not only do these rigidities inhibit improved site development; they also obstruct the logical expansion of the various functional parts of the core. A stubborn owner, an old business which has become an unsuitable neighbour, a type of development which creates dead frontage, all can isolate a portion of a block, prevent an area from redeveloping logically, and even drive expanding business to other of the core, or outside the core, or even outside the city.

Forces other than business produce the colourful elements in the core: business is too much a creature of the national and international world, and too much motivated by a self-interest which stops at property lines to create anything more grand than a building, or to add anything unique to the street scene. The municipality is the major coordinating influence in the core, but so far, few have acted vigorously, partly because there are so many interests which place a great value on the downtown. But the municipalities must share the blame more directly. Most seem to have a very narrow conception of the core's function: it is expected to move cars and store them, contain stores, offices and factories, and provide pedestrian access to them. It is hard to believe that municipal authorities regard their downtown as a place to enjoy, to relax in, or to look at. So for this reason, too, innovation, experiment and imagination in new growth is rare: most of the pleasant features, the idiosyncracies, the surprises are inherited from the past. Also, one gets the impression that dollars and cents alone are deciding the fate of the core as the main centre of non-business activities.

This restraint on the part of the municipality manifests itself in a number of shortcomings. In several cities, the future direction of core expansion is not at all clear, as though it is being left to work itself out through the push and pull of individual decisions. Public institutions are scattered through the core and outside it, sometimes in unsuitable locations; too often the question of whether to decentralize the auditorium, art gallery and museum, or to organize them into a centre is being decided on the basis of land costs alone. Existing historic public open spaces are respected, but rarely appreciated to the extent of being duplicated. There are few vantage points where one can step aside to watch the activity of the core, or, in maritime cities, to get a panorama of the harbour. Nature is excluded from the core, or at best found around its edges. The retail core is an introvert structure, preoccupied with its business and ignoring its surroundings: few efforts are made to relate it to adjoining parts or take advantage of the natural



assets of the setting. (One example of this is downtown London which ignores the river at the end of its main street; but maritime cities can be accused of the same indifference.) Lastly, contemporary building with its anonymous face, is wiping away much of the old character of the central city. Just one example of this: St. John's is the only large city in Canada where you can walk along the main street and at every intersection see the water's edge a few yards away; this perfect symbol of the city's economy is to be eradicated by a truck access route.

Surely it is now obvious that, as the core is one of the most intensively used parts of the city, there must be comprehensive planning if it is to improve. There must be a unifying power able to set the design "theme" of the core, which will link and draw together its elements, and work out the pattern of expansion. This requires less of the uniform restraint of the zoning by-law, but more emphasis on restraint, and greater direction of new growth by the municipality.

Acceptance of this degree of intervention by both business and the municipality, is the stumbling block, but there are a few hopeful signs: new city halls have involved several municipalities in so heavy an expenditure that they are taking special care to encourage suitable surrounding development. Perhaps Windsor has gone furthest in this direction: it has started pushing a boulevard through from the civic square to the waterfront, and may eventually link up with a riverside park that was recently created at the foot of the main shopping street; this has already become a focal point for an auditorium and a local museum. Too often, though, municipal improvements stay within the traditional limits of responsibility. Too often, costly street improvements are unaccompanied by a reassessment of the organization of adjoining land, or by an equivalent concern for the needs of the pedestrian. The closed-street mall is a useful solution to these problems, because it causes a minimum of disturbance to the status quo of property ownership. In many cities, though the main shopping street is also a main artery which cannot be closed; if, instead, an adjoining secondary street is successfully converted, this could shift the centre of shopping activity. However, the closed-street mall will not work in all cities; moreover, it is a hesitant compromise which does not overcome the inadequacies of the grid street and lot layout. If substantial improvement of the core is to be achieved, the mall, or any other concept, will have to be a component of a master plan which predetermines the redevelopment of each block, and has the power to coordinate the use of the constituent properties.

No special case is being made here for any one form of core revitalization: on the contrary, the hope is that every core will continue to typify the city and region it serves, and can overcome the strong tendency to make it look like every other core. Also, I hope there will be less preoccupation with getting maximum use out of the land and more determination to develop the core as the most colorful and most human part of the city.

#### URBAN TRANSPORTATION: THE BEST MEDIUM HAS STILL TO BE CHOSEN

There is no need to describe at length the problem posed by the automobile: present traffic, and improvements to handle it, are cutting ugly strips and patches across every city, affecting properties and choking streets. Every city is tackling these problems, usually with a greater vigour and sophistication of technique than is applied to other urban problems, and, in the smaller cities especially, the auto is still an efficient and popular method of transportation. Nevertheless, I am satisfied that the automobile is the most un-urban method of carrying people, and as cities grow, its use will have to be curtailed. The importance of the automobile as an urban carrier will vary with the size of city. In the smaller metropolitan centres, it will continue to be a major element, with public transit providing a minimal service to a

limited clientele. But beyond a given size, public transit should be favoured, by creating special lanes, subsidizing fares, building peripheral parking lots, and so on; and at a larger size, the major investment in transportation should be in a rapid transit system that will virtually replace the private automobile in the central city.

There is little evidence yet that most municipalities are trying to do much more than cope directly with the rising volume of vehicular traffic. At the present time, the automobile is permitted and given privileges at the expense of something else, if crowded downtown sidewalks and sheared-off front yards are any criteria: already highway improvements that are amenable to their surroundings cannot be afforded. Municipalities will probably continue to build bigger and better roads, for although token acknowledgement is sometimes paid to the need for public transit, plans for road improvements have the greatest popular support. The present danger is that medium sized municipalities will commit themselves financially, and by policy decision, to improvements that have only short-term efficacy, thereby incapacitating themselves for later improvements. By this process, urban transportation will always be out of date.

### LIVING THE GOOD URBAN LIFE

Some parts of a city dictate the type of land and layout they require, or are not influenced too strongly by natural conditions, but residential districts suffer and benefit from the conditions which affect the city as a whole. In Saint John the ground is so irregular in most parts it will never permit an even expansion of the city, but will probably ensure that open space, useful or otherwise, will always be plentiful. In extreme contrast, Regina has so flat a site that development in any direction is unimpeded. London is properly called the Forest City, and for most of its life has had to be more concerned with clearing away natural growth than with replanting. Regina again presents the opposite situation of a city where every tree has been planted by man. Canadian cities also differ in their inheritance of past growth. The railroads chopped up cities like Winnipeg, which grew rapidly during the boom of that era, while Hamilton, which developed as a heavy industrial centre, acquired street after monotonous street of mass produced housing. A large portion of Saint John was destroyed by fire and rebuilt at a time when it lacked prosperity and, in the opinion of some, architectural taste. Past growth has also bequeathed particular problems to each city: Windsor has an extensive root-like form of outer development which is very difficult to fill in and rationalize; pre-war Quebec includes numerous rabbit warrens of high density; the prairie cities possess large old grid subdivisions still only sparsely settled.

These inheritances give shade and emphasis to the contemporary residential growth and problems of each city. But if there are differences, there are also common prospects facing the cities. All should recognize that as they grow to metro politan dimensions, the range of types of housing that their populations need and want extends in the direction of higher densities: it is more likely, however, that the experimentation and even the permissive atmosphere necessary to produce the new forms will not appear because of ignorance or prejudice; certainly, many examples of multiple family housing reflect a failure to understand the requirements of higher density housing. It must also be recognized that the process by which neighbourhoods are now built is considerably different from that which occurred before the war. If earlier subdivision pushed far beyond actual need, it also tended to create odd-shaped lots and leave vacant land in most neighbourhoods, which later were taken up as parks, or filled in with houses of a different period. The end product, the older districts of the cities today, display diversity and contrast as a result. Post-war subdivision, on the other hand, leaves little to chance and less to future decision. Irregularly shaped land is no longer neglected, but made usable by the

bulldozer. The building process is not left to the different tastes of different times, but carried through by one developer on a full-block basis. Open space in a neighbourhood has been reduced to the minimum parkland required by the municipality. Thus, modern subdivision development is more orderly and efficient, but so far also tends to be more sterile and characterless.

#### The Good Neighbourhood

When walking through the many different areas where people live, one realizes that each district, regardless of calibre, has benefited if certain qualities are present and suffered if they are lacking. These qualities are described below as a basis for the appraisal of the different types of residential areas which follows.

1. An atmosphere of community. Some districts are more successful than others in binding individual properties together as a larger whole. With them, the stranger senses, first, that he is entering an area, then, with some embarrassment, that he is an intruder. Here the home life of the resident does not stop at this frontyard; it takes in the activity of the street, the local store at the corner, the church and the playground. And over all these things there is a feeling of ownership which only the residents can possess.

This feeling of community is strongest in the older, more densely built up districts of the Eastern cities. There the inside of the house is often worn and dark, and the yard space negligible. The street is the communal frontyard where children play and men fix their cars, while the rest of the family sits on the porch watching the world go by. Of necessity, such people must participate more in the local community, and for all its failings and ugliness, there is a homely feeling to the street which better class apartment and suburban districts rarely possess. A sense of community, perhaps not as intimate as in the poor areas, also prevails in the old areas which once were separate communities: the district in Edmonton which once was the municipality of Strathcona, and the old centre of Sandwich, now part of Windsor, still retain a unity and spirit which sets them apart from the surrounding development. One of the most carefully structured residential districts is Walkerville, also in Windsor, which was created to house employees of the Hiram Walker distillery, and in layout reflects the socio-economic differences of the residents.

This sense of community is not simply a product of age; a study of these communities reveals that physical layout, though often natural and unintentional growth over the years, is responsible to a considerable extent. If, therefore, one observes that few recently built districts possess a sense of community, it implies a criticism of their design.

2. Good neighbourhood design. Without attempting a detailed discussion of principles and techniques, we may acknowledge the importance, in this period of mass housing programs, of subdivision design that is comprehensive and sufficiently detailed to build a community that is efficient, visually pleasing, suited to the particular needs of its residents, includes the elements needed to make it complete, and has qualities conducive to producing a sense of community. Some of the more important elements of good design are the subject of the next five sections.

3. Protected isolation. Perhaps one of the most obvious and universal truths about residential properties and neighbourhoods is that they stay in better condition and have a longer life if they are cut off from surrounding non-residential areas and activities. Houses on a dead-end street are better off than those on a through road; a residential district several blocks wide stays in better repair than a street of houses within a non-residential area; a pocket of residential blocks located on one side of a main artery keeps in better condition than a district lying between two arteries. There are numerous examples of old, poorly built



districts, with no open space or other community amenities, that nevertheless are able to retain their integrity and good condition because they are not subjected to a daily pounding from through traffic, or riddled with non-residential uses. While conditions of protected isolation prevail, the neighbourhood serves a useful residential function, but if, as the area declines, it is opened up to any kind of potential development, the majority of housing is doomed, not to extinction unfortunately, but to continued misery.

4. Visual contrast. This rudimentary principle of design must be emphasized because contemporary residential growth is so persistently uniform, in type of house and its siting, in the facade of its streets, in the evenness of its development, in the appearance of its shopping centres, and so on. The forces producing uniformity are so powerful, that if a greater diversity is ever to be achieved, a deliberate effort will have to be made to plan residential areas so they look different.

5. A community centre. Even more important than a clear-cut boundary is the centre about which the neighbourhood clusters. It is a point of identification for the neighbourhood; one of the few places where all the residents come together; the place where the local community comes to a head. Most community centres in Canada have grown naturally, along a main road and usually at an intersection, but the more successful ones, from a planning viewpoint, are much more than a line of stores. From these it can be generalized that a good community centre is not just a retail centre, but the place where most of the institutions serving the community are concentrated, and therefore the main centre of local community activity. Like the neighbourhood as a whole, the centre has identifiable limits and a point of focus. The latter may be a municipal building or a park, though usually it is a main intersection. The centre should be sufficiently well organized that people can get to it and move around it easily. Lastly, although it may never be an architectural triumph because it is the product of many hands, it must attract attention and must be a human setting, not one dominated by the automobile or the symbolism of national corporations.

6. Open space and landscaping. Open space and landscaping are probably more under-rated than any other feature. The trees and landscaping of a district can mark its boundaries, establish its character, soundproof it, cool it, and create its contrasts of color and light intensity. A district is improved more by attention to plant and tree growth than by adding to the value of the houses. This is demonstrated by the better residential areas, which invariably have open space as a major feature. Much of the luxury atmosphere of Rockcliffe Village in Ottawa, for instance, is achieved by keeping properties very large, and the roads very narrow, so that the whole district is dominated by natural growth: the houses are largely hidden from view. The same result is more consciously achieved in Wildewood, a middle class district in Winnipeg, which is one of the best Canadian examples of the Radburn principle of fronting properties on a common central park and hiding the roads behind the houses. And again, most of the poorest areas on the outskirts of cities, if they had nothing else, enjoy empty lots and open fields. It seems as though the rich and the poor can have good open space, but the middle income groups, whose housing needs are catered to on a mass production basis, have to get along without it—for the first 10 years at least.

7. Subordination of the auto. When the private automobile is treated as an all-important factor in the layout of a residential area, it becomes objectionable. It confines the neighbourhood design to the few alternatives which enable the car to get right up to the house. It requires most of the land which can reasonably be set aside for public use. It dominates the landscape and introduces an accident hazard precisely where small children most frequently play. It adds significantly to development costs through the installation of pavements, curbing and dual sidewalks. In short, in the moderate cost subdivision, the dictates of the automobile



can be satisfied only at the expense of other features of residential life. If any residential area, new or old, is to be improved, the convenience offered by the automobile must be subordinated to the other needs of the neighbourhood.

8. Minimum standards for family districts. Cities in Western Canada are generally built at lower densities than those in the East; this includes their central residential districts which, though old and poorly built, manage to keep gardens and a bit of grass. Largely because of this, these areas never seem to reach the level of nastiness and disrepair that can be found in the cities further east. At a time when so much private building seems to have the objective of getting as much floor space on a lot as will be tolerated, and with the need to rejuvenate old housing increasing every year, it is necessary to recognize that there are minimum standards for building and rehabilitating family housing areas, which, if undercut, destine a district for premature decline. Setting a maximum gross density is not enough. There must be standards of light, air and privacy for each dwelling unit, and there must be space for recreation and other activities in the neighbourhood. The closer development approaches the minimum standards, the more cleverly and precisely it has to be planned: so it can endure intensive use, so different parts do not conflict (children's play areas with houses, for example), so public areas can be kept clean and tidy, so that boundaries are well defined, and so well used areas are durable as well as good looking.

These seven qualities of good residential districts lead to one important conclusion: to have stability and be pleasing to the eye, a residential district does not have to have a picturesque topography or costly housing, but it must have a sensible density, a street system suitable for the land, variety and contrast in layout, a proper balance of neighbourhood facilities, and an imaginative use of open space and natural growth. Without these qualities, well designed housing is mediocre; with them, the simplest housing can form a healthy attractive neighbourhood.

#### The Shortcomings of Suburbia

Criticism of post-war suburbs has almost become a national sport, perhaps because, in the part of the city least restricted by the dead hand of the past, modern city building has regularly produced the trite and the obvious. One can criticize suburban architecture, which from coast to coast follows the strawberry box school, and continue with a detailed critique of the street and neighbourhood. But perhaps the failings of suburban growth can be reduced to two main faults.

First, suburban neighbourhood design is dominated by an indiscriminating desire for space. This has produced lots of space for all things and between all things. The typical residential street is dominated by an expanse of road, boulevards, sidewalks and front yards, against which the single storey house offers insignificant contrast. This low line of houses is occasionally broken by a square of park, but rarely by more imaginatively planned open space designed to contrast with the street. The shopping centre stands in asphalt isolation from the surrounding development, typically a bald line or "L" of low stores. Other components of the suburbs - school grounds, community centres and the like - add to the expanse. Largely because of the developer's scorched earth policy, there are few trees and bush growth to fill the void; instead the popular standard of lot layout - front lawn, path to front door, driveway to one side of lot, low hedge if any, not much garden, a picture window unobscured - contributes to the visual monotony.

The second failing of suburbia is that it has few of the unifying features that the terms "neighbourhood" implies. One area runs into the next, divided only by main roads and roadside development. The methods used to protect and isolate the houses are half-hearted and only

partly successful. In Edmonton, much of the new subdivision has service roads and grass boulevards between the main arteries and the residential properties, but in other cities, the curvilinear road design alone is usually relied upon to discourage non-local traffic, with few attempts made to add a buffer. Also, in every city there are countless examples of houses fronting on main streets, and shopping centres or gas stations flanking a row of houses. The average suburb is without a centre, too. Rather, development is turned inside out, so its shopping centres are on the edges and oriented toward the road. Besides, the shopping centre fails as a community centre because, being organized strictly to do business, it has no space or time for other community needs; and unfortunately the other community facilities are only occasionally combined with the shops to form a well rounded neighbourhood centre.

It is perhaps too obvious to conclude that improvement will only come with more detailed neighbourhood planning which relates the essential components to each other, and, more than anything else, minimizes the influence of the automobile over neighbourhood design.

Post-war private building has been little concerned with the need for low cost housing; presumably, under existing conditions, this market offers little or no economic incentive. It is therefore worthwhile noting that certain pre-war and wartime efforts offer examples of how low cost housing can be built. The economies are realized by reducing subdivision standards and services to their minimum. Wartime housing projects illustrate one approach which has been successful enough to keep them in good condition up to the present time. Lots are only 35-40 feet by 120 feet, but by building two storey houses, the yard area is kept as large as possible. Other savings in land come from reducing the local road to an 18 foot width of pavement and running the sidewalks right alongside them. The compactness of this layout is relieved by open spaces which sometimes are the focal point of the subdivision. It is indicative of the quality of the layout that many wartime subdivisions turn their backs on surrounding through roads and even include a perimeter buffer strip. Older subdivisions which filled in gradually during the depression years, demonstrate that a residential area can get along quite well without many of the niceties now insisted upon. Roads and sidewalks can be gravelled, ditches can take the place of curbs and storm sewers, even building standards can be cut to the bone. The district produced may never become a model of middle-class suburbia, it may even be slightly more costly to maintain, but it is one way for low income families to occupy their own homes instead of subsidized housing. In a society which places great value on home ownership, surely this should be an important objective.

#### Preserving the Old Districts

A report of the Advisory Commission on Reconstruction, published at the end of the last war, roughly estimated that, 1941, 40 per cent of the dwellings in urban Canada were 31 years old and over, with the greatest volume of residential construction having taken place in the twenties. 'Numbers of these dwellings have since been demolished, but it is obvious that in every city there are still large areas of houses which are now forty to sixty years of age. Despite old age and deficiencies, these districts include centres and pockets of development which have built up and elaborated over the years, so they now are among the more interesting and characterful sections of the city. At the same time, much of it is not good housing: three storey houses achieving high densities are common, especially in Ontario; many of the smaller houses are of simple frame construction which soon deteriorates if neglected; some were jerry-built; some streets of houses are wedged tightly between older developments; much is dull and monotonous.

This old housing is being subjected to pressures and strains created by the post-war growth of the city. Central districts lie in the path of

the expanding core, which under speculative development, tends to open up more area than it needs. In a similar fashion, institutions which previously were reasonably compatible with their residential neighbours, want to expand their plant and parking space while more institutions try to locate cheap central quarters among the old houses. Small industries which never were compatible, grow into bigger industries. The old mansions of a city create a problem because they were designed for a particular use of a past era; obsolete and expensive to maintain, the owners seek to put them to any use that is economical, with the result that they, more than small houses, are in danger of being overused and misused. And all residential districts close to the city centre are incapable of handling either the volume of traffic to and from the downtown area, or the automobiles their residents now own.

If the old houses of the central city were destined to disappear in the near future, their present living conditions would be of passing interest, but it is inconceivable that the majority of them will be taken over by non-residential operations or replaced by new housing. In fact, the old districts will probably continue to supply a wide range of accommodation - single rooms, flats, and low cost family housing; they will remain the customary locale of ethnic settlements; and they will increasingly reflect a tendency, apparent so far only in the larger cities, for some middle class families to live in the central city.

It is surprising how well this housing is being maintained on the whole. But the owners are labouring under disadvantages which only the municipality can overcome, and yet the older districts seem to be less protected by municipal policy than are the new suburbs. Zoning is the typical defence, a negative safeguard with legal non-conforming loopholes that have particular significance in this part of the city. Slum clearance projects have removed relatively small amounts of deteriorated housing, and could not cope financially with much larger areas; even if possible, it is debatable whether a large amount of public or subsidized housing is desirable in the central city. What is needed are broad, continuing municipal programs to protect and improve the integrity of the older houses and their neighbourhoods. The appropriate action would have to vary with the particular need of the area: a decision not to widen a heavily used road, or to close it; punching a hole in a tight block of houses; the removal of non-conforming uses and houses in bad condition. The appropriate action should also take into consideration the attitude of the residents: in districts displaying local pride, it might be logical, and economical, to give indirect public support (e.g., a supply of house paint at cost) rather than undertake public works. Lastly, the appropriate action will have to maintain the existing use of housing, or provide for a transition to another use; if the objective is to assist but not eradicate an area of low cost housing, it will be important to avoid removing or driving away such features as the corner store, cut-rate shops and space to work on the car.

Rehabilitation on a large scale has not yet been faced by Canadian municipalities. Because it involves new expenditures, extra administration, and a degree of community improvement not yet practiced, municipalities will likely resist assuming this responsibility, especially if already committed to expensive slum clearance project.

#### The Good Life at High Densities

The number of apartments built varies a great deal from city to city, but on the whole they are one of the most distressing products of post-war urban growth. The buildings are usually of a trite plain design, sited with a minimum of imagination and landscaping. Much of the fault stems from a preoccupation with achieving a maximum density on a lot designed for low density use, complicated by the need to provide off-street parking space: the end-product is necessarily a structure which hogs a site surfaced in large part with asphalt. When several apartment blocks are built side by side, the effect is so arid one wonders why any man, whose wife is less than very loving, bothers to come home at night.



Up to now apartment sites have been selected more on the basis of the advantages of the site than in accordance with an overall plan; zoning is the main regulator, but in some cities this has limited significance in the older districts. Properties that are deep and wide are invariably sought out, and this has resulted in the replacement of many old, but nevertheless handsome mansions, as well as the filling in of irregular parcels which previously had been neglected. (What will happen, one wonders, when the supply of large lots is used up? Will apartment standards drop, rents go up, or will land values go down?) Apartment developers usually ignore areas in need of reconstruction, preferring to capitalize upon the attractiveness of well landscaped, stable districts. As the apartments appear, that charm disappears, and too often the stability of the district is weakened. In the new suburbs, apartments are cramped on the land at higher densities than the surrounding houses but with no compensating features: frequently they lie alongside a main road or butt up against a shopping centre. In some instances one is led to conclude that these buildings are intended to be sound barriers rather than housing. In the old districts, the introduction of more intensive housing brings drastic changes to the existing pattern of development. At present, the allocation of land for high density housing is still treated as a zoning matter, and the implications of introducing larger buildings and more people into an area are substantially ignored. It is difficult to see how any improvement can be made here without assembling properties in accordance with a plan designed to prepare a district for high density use. Obviously, to do this a fair degree of public participation will be necessary.

Post-war building trends substantially ignore the fact that many families, particularly in Eastern and Maritime cities, live in multiple unit buildings of one kind or another. Row housing, duplexes and the like, permit a moderate increase in density over the single family unit, but to compensate for this gain, they require a skillful site layout. Because this is a characteristic failing of Canadian building, there are many bad examples of multiple unit buildings across the country, which probably accounts for the strong resistance to new efforts in this direction. There are some good examples though. A street of row houses in Walkerville, Windsor, some approaching the charm of ivy-covered cottages, comes to mind as an example from the past. Among the recent products, public housing projects seem to represent the best we can do. The rows are not built too long to be monotonous, the street system and siting of the buildings create a diversified scene, even though they have a straight-forward design. The project site is large enough that the buildings are oriented away from the main road, and interior roads are kept to a minimum; instead, foot paths and stretches of grass run between many of the units. Parking space is organized on a communal basis.

Nevertheless, the projects have several common failings. Invariably they are devoid of trees and shrubbery. Perhaps this is a maintenance economy, but it does much to establish an impersonal, institutional and, in the summer, oven-like atmosphere. Open space is not usually segregated, and inevitably the children play around the houses: at these densities there is a need for at least one organized recreation area removed from the houses. Perhaps the most striking omission is that there is no outdoor privacy, or any demarcation to show that certain grounds belong to a particular unit. As a result, each unit is never more than an anonymous part of the institutional whole, bound together by unbroken stretches of open space. Surely each resident should be given the opportunity to enjoy a feeling of possession, if only to encourage his responsibility for maintenance.

#### WIDENING THE SUPPLY OF OPEN SPACE

No feature of contemporary urban growth suffers more than open space from our insistence on accounting for every scrap of urban land. The error lies not only in inadequate provision, but also in an oversimplified



concept of its form and use: open space has become a parcel of land set aside for use as a park or a playground, which means it is either equipped for sports, or is a square, perhaps a triangle of land, levelled, grassed and cleared of all growth except for a selection of trees, shrubs and neat beds of plants. Somehow, the lessons offered by the past have not been taken to heart, so that with very few exceptions, we must still look at pre-war products to appreciate the wide range of open space it is possible to have.

In a sense, the largest open space is that which offers panorama. This may be a view of the sea, a river, a section of the city, or one of its features. The City of Edmonton has a well established policy of developing, as public boulevards, the lands overlooking the broad and deep South Saskatchewan River valley. Regina has no opportunity to look down or up, so, early in the century, the creek running through the city was dammed to make a lake, and extensive parkland was planted with trees. This now forms a very cool setting for the provincial government building, with ample space for even socialist government expansion. Other cities have inherited similar bounties, but too often - in the East more than West it is my impression - they are not adequately preserved or developed. Fort Howe, in Saint John, for example, affords an aerial view of the city and harbour which Toronto would give its eye teeth to possess, yet it is undeveloped and neglected. Even more common is a failure to have adequate points of public access to the sea or riverfront, especially in the older parts of the city: the railroads are a frequent obstruction. Every city has at least one major, developed park which is its pride and joy. To my knowledge, all are inheritances from the past. A surprising number were military holdings originally. Others are ravines and valley lands, unsuitable for intensive development. But clearly, some cities have been more methodical than others in parkland acquisition and preservation. For example, Edmonton has four golf courses, two municipally owned, close to the centre of town: compared this with the Shaughnessy Golf Course in Vancouver now close to being subdivided, and the shortage of golf links common to most large cities. One other form of major open space is a connected system of parks, public grounds, boulevards and paths. A good example is in Calgary, where a boulevard runs along the top of the Bow River valley from a park overlooking the valley, to the grounds of the Jubilee Auditorium about a mile and a half away. With its emphasis on variety, an ability to utilize a wide range of types of land, and an effect of tying a district together, this is one of the most potentially useful concepts of open space.

It is not necessary to recite the standard need for local parks, but the all too standardized approach should be pointed up. Too many parks look as though they were surrendered under the subdivision regulations rather than included as a component of the neighbourhood design; their original lack of justification perhaps explains why they remain open stretches of grass, clearly labelled "Park", and set apart from their surroundings. Some of the better subdivisions use space as a visual breather, or to preserve a natural feature, or as a setting for the houses: again, the Wildewood subdivision in Winnipeg, with a winding park as its central theme, provides an exceptional example. Occasionally, too, one comes across a juxtaposed shopping centre and park which hints at a way to create, within a park setting, a community centre of shops and local public services. An obvious scheme perhaps, but how rarely is it attempted.

The attitude of keeping open space in its place also prevents it from finding its way into the downtown core. I am tempted to generalize that one of the main design inadequacies of Canadian cores is caused by an ignorance of the value and versatility of open space. Traditionally, central open space is limited to that which is immediately utilitarian or obviously decorative. Most fall into one or more of these categories:

- the commemorative square

- a green space set apart for people to rest

a natural feature that has been preserved  
a setting for a public building  
open space geometrically positioned in the original town plan  
an outdoors business activity, most frequently a market  
The more successful open spaces, if measured by intensity of use or  
esthetic appeal, are areas which have outlived their original function  
and been allowed to convert to a more casual use. Quebec within the  
walls offers several examples: Dufferin Terrace, once a battery site  
commanding the St. Lawrence, evolved into the main promenade of the  
city, and the two squares nearby that are focal points of the tourist  
city, previously functioned as a parade square and a market.

These represent a type of open space that only recently has  
received adequate recognition: an area of public activity which func-  
tions as part of, or is physically related to, the main function of the  
core. The sidewalk and the public market are the traditional versions,  
the mall is recent. Such open space does not have standard dimensions  
or layout; it can use the odd, left-over scraps and corners, the pieces  
that are most readily surrendered for such a negative use. But if more  
is to be done in this direction, we must have a better appreciation of  
the social psychology of open space in the core. We must learn that  
people like to watch people, to see them act, and to get into the act  
themselves. The citizen comes to see what is new with his fellow  
citizens, and to take part in the daily performance of the human comedy:  
as glamour girl or undeniable romeo, superior observer or lonely isolate,  
humanitarian or proselytizer. The people create the drama, but the  
planner-architect must first create the setting. Good central open  
space of any size has transition and contrast in its middle, and ends  
that lead somewhere else. There is unity, but also diversity in color,  
design and surface texture. Sound is controlled; the noise and  
activity of auto traffic serves as a background to open space, not an  
intrusion. In some places, people are properly crowded together, but  
there should be quiet sidewaters as well, even within the same space.  
Whatever is done, the objective is to give the users maximum freedom to  
make of the place what they will, by creating a setting which suits them  
and the environment: for all its appeal, Piazza San Marco should not be  
imported.

The supply as well as the quality of open space varies considerably from  
city to city. The quantity seems to increase from east to west, but it is  
probably true that every city has a shortage of open space and, in addition,  
under prevailing conditions of compact development, needs a continuing program  
of parks acquisition to anticipate future requirements. One can easily  
become pessimistic about this being done. Some cities have never been overly  
concerned about open space, others have enjoyed such an abundance within the  
city and without, that the need to prepare for the time when the population  
will outgrow the natural supply is not taken seriously. In fact, all cities  
are too close to their small town and frontier days to appreciate what they  
are in the process of losing. Besides, open space is never regarded as the  
most pressing need: how many cities have even stopped polluting the water-  
ways within their boundaries? The prospect of a wider, more intelligent use  
of open space is gloomiest of all in the core, for, in the part of the city  
where land values are highest, what chance is there for a land use which  
cannot be judged by sound business principles?

#### THE CITY AS A "COLLECTIVE WORK OF ART"

Lewis Mumford: (The city) is a conscious work of art, and it holds  
within its communal framework many simpler and more personal forms of  
art. Mind takes form in the city; and in turn, urban forms condition  
mind. . . . The dome and the spire, the open avenue and the closed  
court, tell the story, not merely of different physical accommodations,  
but of essentially different conceptions of man's destiny. The city  
is both a physical utility for collective living and a symbol of those  
collective purposes and unanimities that arise under such favouring

circumstance. With language itself, it remains man's greatest work of art. - Culture of Cities.

The previous paragraphs have followed the customary planning approach of looking at each functional part of the city separately. This overlooks, or at any rate underemphasizes, a quality of all contemporary urban growth which should be primary cause for concern among planners.

From one viewpoint, this can be described as a lack of visual diversity. The development patterns of Canadian cities have basically two origins. Some cities have grown naturally, coping with land conditions piece-meal, following original trails and growing at the whim of individual developers. Victoria, St. John s and old Quebec are good examples. But more often, city growth, including parts of these three cities, has adhered to, and up to the post-war period extended, a grid system. Thus, order and regularity prevails in the layout of most cities, but contrast, change and surprise are rare, and what does exist is not a product of forethought, but of chance and gradual evolution. Planning removes the element of chance in urban growth, but so far has not often been successful in introducing intentional contrast, and recent building has only consolidated the regularity of urban design.

The growing tendency to urban uniformity may also be expressed as a loss of local and regional differences in urban growth. In terms of founding dates and site conditions, Canadian cities probably represent as wide a range as will be found in any country. It is still possible to see these cities as the products of several generations of people who have a historical background that still influences their attitudes, their values and their tongues, who make a living in particular ways, and who have adapted their way of life and their city to the weather, land form, changing technology and external pressures. But the image of each city is blurring. More and more they are coming to look alike, as new construction reflects national and international patterns: gas stations are identical in appearance from coast to coast; roadside development on the outskirts of every city uses identical building and advertising techniques; basically the same subdivision and house plans are adopted across the country (because, one is tempted to believe, they are most likely to be accepted by, often were designed by, the federal mortgaging authority); office buildings reflect international architectural styles and use module-dominated, standardized building techniques and materials. No doubt there is something to be said about these tendencies being desirable or unavoidable, but there is much to be said, and little being done, about preserving and encouraging individualism in Canadian cities. It is naturally repugnant to the average resident if he is told his town looks like many others, or has no character: it implies the same may be said about him, and certainly there is an interaction between a city and its people which shapes both. It may well be that the universal urban forms that are imported will eventually prove unsatisfactory under local conditions, or worse, will work to obliterate the identity of the residents. The planner, who presumes to rationalize the building process, will be increasingly challenged by this wholesale depersonalization of cities, and be confronted with the aesthetic issue of contemporary urban growth: whether, with such an impoverished background of conscious urban design in this country, the strong tendency to regularize development can be overcome.

#### WILL IT BE AN ERA OF PLANNING?

These are the major issues I see cropping up in all metropolitan centres during this period of rapid urbanization. Some are inheritances from the past to be overcome. Some involve foreseeing the long range needs of the future. All are intensified by the present rapid pace of growth. Needless to say on this journal, that a sound planning program is essential if we are to cope with these problems; more to the point, more effective planning is needed than now prevails. This is less a criticism of Canadian planning talent and more a concern about the



atmosphere the planner works in today. Will cities face the issues that arise as they grow to metropolitan stature? There is no final answer except a post factum one, for no form of development, good or bad, is inevitable. Fortunately many of the important decisions have still to be made, but we must admit that one pedestrian mall does not represent a revolution in downtown design, nor one Don Mills a major break-through in suburbia.

The planner must recognize that Canadian society has ingrained attitudes and values which are inimical to the truly urban way of life, and particularly the planning action it entails. It might be well to summarize these.

First, many older Canadians (including those now in positions of authority) grew up on a farm or in a small town, and if younger adults did not take part in this way of life, many inherited a family background that did. Moreover, a generation ago our largest cities were small enough and sufficiently loose-knit for the countryside to be near at hand. There was land to spare, and people displayed a frontier-like indifference to what was done with it. Roderick Haig-Brown describes how each of the resources of British Columbia was, of necessity, ransacked in order to open up the province.<sup>2</sup> With Canada still a country of wide open spaces, the traditional attitude to the land has been carried over to the urban setting where, as in earlier times, the cost of indifference is not yet fully realized.

Second, this heritage, along with a failure to import other than the most straight forward planning concepts when the cities were laid out, has resulted in Canadians having almost no first-hand knowledge of the more sophisticated and architecturally interesting forms of civic design.

Third, in this country, the social value of land ownership is high, while tenancy and public ownership is held suspect. Private land ownership is so sacrosanct in public opinion and law, that it can question the propriety of planning proposals and defeat legitimate community objectives. One of the most effective limitations it imposes on planning comes from the extreme stability it gives to property lines, even when they divide the land into parcels unsuitable for modern use.

Fourth, the municipality is expected to provide the necessities of public life, but its responsibility for community pleasures is limited. Compared with European cities, municipal responsibility in Canada for promoting the arts is small and uncertain. Several metropolitan cities do not have a public auditorium. Many art galleries and museums are privately organized operations billeted in old houses. The preservation of local history has only recently started to receive public support. City halls are singularly lacking in outdoor space for civic celebrations. A hard thing to generalize upon certainly, but I am tempted to conclude that, on the municipal level of government, no great responsibility is accepted to propagate the cultural and social pleasures of the people. Nor does the populace, in turn, either expect these pleasures or hold them in very high esteem. The attitude toward city building is that it be concerned with the pioneer tasks of supplying a roof over your head, and adequate supply of water and other basic necessities, and rarely are there aggressive demonstrations of public dissatisfaction with an urban setting that is visually trite or ugly or unable to provide the finer, non-essential things of urban life.

Fifth, there is a widespread reluctance to subordinate the ideas and wishes of the individual to any plan designed to meet the needs of the community as a whole. Whether explained as human nature or a continuation of the pioneer spirit, this attitude in its extreme forms directly opposes the basic premises of planning. The attitude "We have no right to tell a person what to do with his land" still prevails, and a fear of flouting public opinion and private interests which hold this view can be read into municipal hesitation to undertake new planning programs.



The criticism of these social values is not that they are inherently wrong, but that they are out of date as far as city building is concerned. The period of exploration by rugged individualists is over, and we are confronted in our cities with a version of the world problem created by our growing population: determining to what extent man must submit to common objectives and common operations in order to survive. We are at the stage of urban growth in Canada which requires, not grudging recognition of the need to plan in the trouble spots, but positive recognition of the value of taking everything into one's ken, of knowing, when you pay Paul, how much you are liable to rob Peter. The alternative is to have, not collapse, but mediocrity and inadequacy in our cities.

This problem is still being resolved, and the planner regularly finds himself in a dilemma. On the one hand he is better aware than most of what must be done, but on the other hand, every day he hears opinions expressed and decisions made which prevent the community growing sensibly and efficiently. Should he play a more active part in putting plans across? Some will point out that the municipal planner is a professional servant of the people and thereby limited in his public behaviour; the planning profession as a group in Canada has tacitly pursued a policy of not taking a public stand on issues. Others say the task of gaining acceptance of planning is lengthy and painstaking: much is still to be done, but much has already been achieved. But the nagging question persists: How much time do we have before the city of the next few generations is built? Too often the answer seems to be that it is half built already, in all its archaic splendor; the planner is rapidly becoming the person who should have been listened to. So to the question "Should the planner work at putting planning ideas across?" the answer often seems to be "Who else? Who better?" There is also a selfish aspect to this answer. Planning, like any creative act, must be marked by achievement; frustrated planners turn out handsome reports, but happy planners see their ideas implemented by a sympathetic community. Surely this is an important part of the adventure of planning.

<sup>1</sup> Subcommittee on Housing and Community Planning, Final Report, Queen's Printer, Ottawa, 1946, p. 29.

<sup>2</sup> R. Haig-Brown, *The Living Land*, Macmillan, Toronto, 1961, chap. I

## ECONOMICS AND CONSERVATION

G. K. GOUNDREY

THE CANADIAN JOURNAL OF ECONOMICS & POLITICAL SCIENCE,

VOL. 26, NO. 2, MAY 1960

Republished by permission of the

CANADIAN JOURNAL OF ECONOMICS AND POLITICAL SCIENCE,  
100 ST. GEORGE STREET,  
TORONTO 5, ONTARIO

The conservation movement is widespread and influential. The message of the movement has been accepted by governments, philanthropic institutions, and in some cases (particularly for land use and forest management) has apparently been accepted by firms and individuals. The word "apparently" is used advisedly because although in many cases public utterances suggest acceptance, practice denotes more a retreat from ignorance than an acceptance of an ideal rate of utilization. A lessening of ignorance was particularly noticeable in the establishment of integrated operations, "unitization" (that is, common operating organizations for ore bodies and oil fields), cropping and cultivation practices, and the reduction of waste by the development of by-products.\*

In spite of the acceptance of conservation teachings and the establishment of conservation policies by governments and even (apparently) by firms and individuals, economists have, as a rule, shown little sympathy with the movement. Even some writers on the management of resources who are not economists have swung towards the optimum as set out in economic theory and towards reliance on a perfectly competitive system for a "proper" solution to the problem of rates of utilization of resources. In practice, however, and in spite of the accepted economic theory of use, many economists have shown some uneasiness about the rates and types of exploitation that result from the competitive model. Two statements will suffice to show this uneasiness although others could be quoted.

It may be -- and this is a disquieting thought -- that all civilizations have been maintained only by the expenditure of irreplaceable capital -- i.e. by "mining" both of the soil and of mineral resources.<sup>1</sup>

It is possible that self-interest is leading private capitalists to make reckless exploitation of certain natural resources -- animal stocks or minerals or forest trees -- to the great advantage of the present army of consumers, but to the prejudice of the interests of future generations, or even of existing generations in future years.<sup>2</sup>

Few economists however, have carried out a detailed analysis of the writings on conservation, and in their theoretical work economists have neglected or even disparaged the conservation movement. Professor Scott, alone in Canada, has published a careful study of the literature on conservation.<sup>3</sup> Comparatively speaking, his book is sympathetic to many conservation arguments. Un-

fortunately, however, the theoretical framework is traditional capital theory, a theoretical framework that not very many economists use regularly. Moreover, capital theory as used by Professor Scott was not familiar to most early writers on conservation. If the conservation movement has an underlying economic theory, it seems safe to say that it is not a sophisticated theory of capital.

The purpose of this note is to outline the economic theory which apparently underlies the arguments for conservation. In passing, I hope to show that the conservation movement has respectable economic foundations, although it takes certain conclusions of economic analysis too literally. It is always dangerous to apply economic theory direct to the real world. ". . . I will say that I think the most dangerous policy maker is the man who knows the answer, because he feels he can take it literally from his theory."<sup>4</sup> And much of the lack of sympathy with conservation teachings arises from the naive and highly simplified view of the processes of production which appears to underlie these teachings.

\*This note was written after discussions with J. N. Wolfe, Wm. C. Hood, J. H. Dales, A. D. Scott, and M. F. Bauer, all of whom made valuable comments. It is therefore not surprising to find that in those cases where the conservation movement has had the greatest impact and done the most good (judged by volume of output and the level of well-being) the underlying economic model was not a significant factor. In other words the conservation movement has been valuable in spite of its economic theory, not because of it. On the other hand I am convinced that, in the long run, lasting good will result from the underlying economic theory, largely because the conservation movement is acting in such a way as to make its underlying model more appropriate for policy.<sup>5</sup>

It is not intended here to analyse writings on conservation and distil from them a "pure" economic theory which represents their theoretical framework. The literature has been digested and discussed by Professor Scott and to repeat the process would be a time-consuming and thankless task. Instead, the underlying economic model will be made apparent from first principles.

Reduced to its essence, the conservation argument with respect to the utilization of resources is made up of a number of propositions.

1. Consumption is the destruction of resources, and consumption reduces the quantity of resources.

2. However, resources are of two types: renewable (flow) resources and non-renewable (fund) resources. (There are numerous variations of these categories.) Renewable resources are those which replace themselves (at rates determined by many factors) or can be replaced. Non-renewable resources cannot be replaced or maintained and are reduced by consumption.

3. Resources are necessary to the production of useful things, that is, production cannot take place without resources.

4. Therefore, if the rate at which renewable resources are being destroyed by consumption exceeds the rate at which they are renewed, or if non-renewable resources are being used up, the amount of resources is reduced.

5. Society must act to protect future production.

When conservation arguments are reduced to these simple propositions, the underlying economic model becomes immediately apparent. It is the model of the thoroughgoing stationary state under perfectly competitive conditions.

A recapitulation of the classical stationary state is perhaps in order. The classical stationary state was presented as the final equilibrium towards which all economies are tending, and thus held, and still holds implicitly, the same position with respect to long-run change as equilibrium holds in short-run analysis. Its purpose was to consider what conditions would be when change

ceased, that is, when population stopped growing, tastes stopped changing, all techniques were known, all discoveries had been made, and so forth. For this reason it was a valuable analytical tool, particularly in the form of the theory of an optimum population of which it is the most general case. The clearest model of the stationary state was that of Professor Pigou, who set up a model of given resources and given techniques (that is, perfect knowledge), certainty of expectations, given tastes, and given population.<sup>6</sup> On the assumption of diminishing marginal utility and diminishing returns in all directions, the nature of the equilibrium was described. Professor Pigou demonstrated that if techniques are given, population (and tastes) are given, capital must also be given, that is, capital must be maintained intact over time.<sup>7</sup> In dynamic situations, "maintaining capital intact" is a very difficult concept and very difficult to define. But in the stationary state it can be given a quite precise definition. In a thoroughgoing stationary state "...the maintenance intact of capital...means simply its conservation in physically identical form."<sup>8</sup> Pigou pointed out that this was incompatible with the use of non-renewable resources: "The stores of coal, minerals, oil and so on that Nature had laid up--are liable to be depleted by the processes that yield real income. Plainly ... some part of the gross output that comes into being is not real incomings....In so far as this is so our state is not in the strictest sense stationary, for, whatever we do, we cannot make good the 'wear and tear' that is in this way inflicted on nature's stores."<sup>9</sup>

It is clear then that a thoroughgoing stationary state involves the use of renewable resources at the rate at which they are being replaced, and that non-renewable resources cannot be used at all.

Under Pigou's assumption of diminishing returns there is no way in which a future deficiency in resources can be made up. Sustaining the yield at some level of output from forests, balancing the catch against the additions to population in fishing, maintaining the physical and chemical composition of the soil in agriculture, stabilizing the rates of run-off in streams, all these are necessary to continued real income. With given techniques and knowledge, investment cannot make up for depletion. To take a simple example: a resource is depleted "a" per cent by the process which produces a given amount of income in one year. This level of income can (we will assume) be maintained by an addition of "b" per cent to the produced capital stock. But this process changes the ratio of capital stock to resources and, if repeated, would mean that more than "b" per cent would have to be added to the produced capital stock in future years because of diminishing returns. Because investment would require consumption to be reduced, real incomes would have to fall. The assumption of diminishing returns would break down only if man-made capital were a perfect substitute for resources--and a perfect substitute in total, not just at the margin. But this would mean the production of income of identical utility, with given tastes and knowledge, with no resources at all, because resources and man-made capital would be identical. Because of the assumption of diminishing marginal utility in all directions, constant income means the same product mix in output. But it is doubtful whether even economists would make such an heroic assumption, that is, that the same product mix could be produced without resources.

We may fairly conclude that the implicit conservation model and the explicit classical stationary state model are identical.

Now I am not suggesting that Professor Pigou per se was the teacher of the conservationists. What I am suggesting is that The Economics of Stationary States is an explicit formalization of the ultimate long-run equilibrium model that serious students of economics followed in the nineteenth century and the early twentieth century. Perhaps it is still followed, but it certainly was related to theories of an "optimum" population and undoubtedly grew out of the redirection given to economics by Ricardo and his followers.<sup>10</sup> This model seems to be implied in the above quotations from Sir Dennis Robertson and Professor Boulding and is a model quite in keeping with the dire predictions of many conservationists and students of population growth.<sup>11</sup> It must be remembered that the conservation movement was born in an atmosphere permeated with the



economics of stationary states and, it would appear, implicitly adopted this model as the foundation of its policies. In other words, conservationists accepted this basic model drawn from economics, worked out its implications for resource policies, and then found that economists could not be persuaded to accept the policies implied in the economic model.

It is interesting to examine the model of the classical stationary state and determine why it has proved unacceptable to economists. On logical grounds, only one major criticism was made of the model formalized by Professor Pigou, and while the criticism leads to a model much more valuable in many ways for purposes of policy, its logic is not impressive.<sup>12</sup> The reason why economists rejected the implications of the model must be the unacceptability of the assumptions.

Diminishing returns and diminishing marginal utility were not rejected as assumptions. Nor were given tastes. The hope that tastes would change in such a way as to make diminishing returns unimportant would have been putting the cart before the horse. The assumptions not accepted were (1) given and known resources, and (2) given and known techniques.

The fact that resources are "relative to wants" is not the reason for rejecting the assumption of given resources. With given tastes the relativity of resources disappears. The reason for the rejection is to be found in discovery and in the opening of frontiers. Assuming the universe to be finite, the hope that discovery will counterbalance depletion must be a short-run expectation (although the short run may be very long).<sup>13</sup> It is clear that new discoveries of existing resources cannot provide the reason for the rejection of the long-run conservation model.

The assumption which is at the heart of the rejection is the assumption of given techniques. "In the absence of technical change"<sup>14</sup> should be the first six words of every conclusion of the stationary state and conservation model. Economists reject the stationary state because they reject the "given technique" assumption, not because the analysis is invalid given its assumptions. Stated in this way, the real conflict between economists and conservationists is that the former have (blind?) faith in science and technology whereas the latter want to ensure that if our confidence should prove to be misplaced, we have not irrevocably committed ourselves to decline and poverty. From this fear of failure on the part of science and technology follows, as insurance for the future, an emphasis on flow or renewable resources as the "best" resources to depend on.

Technical knowledge is a valuable capital asset. Knowledge is an asset which not only does not depreciate with use, but increases. It may, of course, become obsolete but only if a superior substitute is discovered. There is a strong presumption that knowledge is a permanent resource, normally augmentable, and that it only becomes obsolete in part if augmented in whole. It is therefore no accident that many recent works on economic growth emphasize research and technical knowledge.

Even if the "stationary state" model proves unacceptable, the conservation movement has had a great deal of value. Most important have been the changes in practices which have followed conservation teachings, changes which include giving operators the information and technical know-how economists have wrongly assumed they had. Also, research on methods of exploitation, carried out and supported by conservation groups, has increased productivity. It should also be noted that while economists conveniently forget that social and private costs and benefits may differ, conservationists conveniently forget that social and private costs and benefits may be equal. The two biased policies which result tend to equalize each other, a fortunate thing for Western civilization.<sup>15</sup> Might it not be still better if somewhere, sometime, the two groups concerned with the administration of scarce resources co-operated a little more? The need

for co-operation is greatly increased by any fear that the technological frontier may cease to expand or may move too slowly. Then diminishing returns are likely to set in and, particularly if population is growing, problems arise. "The glory that was Rome" fills no empty stomachs.

<sup>1</sup> K. E. Boulding, "Income or Welfare," *Review of Economic Studies*, XVII, 1949-50, 85.

<sup>2</sup> D. H. Robertson, *The Control of Industry* (Cambridge, 1923), 103.

<sup>3</sup> A. D. Scott, *Natural Resources: The Economics of Conservation* (Toronto, 1955).

<sup>4</sup> J. H. Williams, "An Economist's Confessions," *American Economic Review*, XLII, No. 1, March, 1952, 12.

<sup>5</sup> This argument may require clarification. Much conservation literature has been directed at demonstrating: (a) that individuals and firms were not acting rationally (in economic terms), i.e. that people could have higher incomes or firms better profits if they changed their practices; examples are wind breaks, shelter belts, contour plowing improved forest management and integrated operations; (b) that social benefits and private benefits differ; examples are watershed protection, flood and run-off control, and the close interrelation of resource utilization, tourism, and wildlife. In other words, in spite of an economic model with assumptions of rational behaviour and perfect knowledge, many of the conservation teachings were directed at making these assumptions realistic, through education.

<sup>6</sup> *The Economics of Stationary States* (London, 1935). It should be added that the analysis is in real terms, i.e. constant income means constant consumption.

<sup>7</sup> "In a stationary state both the stock of equipment and the annual rate of consumption must be constant. This implies that the rate at which equipment wears out and has to be replaced is constant. For, if this condition is not satisfied, the stock of equipment can only be held stationary by varying the amounts of income being withdrawn from consumption to meet depreciation in different years." *Ibid.*, 17.

<sup>8</sup> *Ibid.*, 21 (my italics).

<sup>9</sup> *Ibid.*, 22 (my italics).

<sup>10</sup> Many students of economic thought contrast the theory founded on Ricardo with the type of growth theory that would have continued the Adam Smith tradition. I found two articles by J. H. Williams very helpful: "An Economist's Confessions"; and "An Appraisal of Keynesian Economics," *American Economic Review*, XXXVIII, no. 2, May, 1948, 273-90. The suggestion that the model of the stationary state underlies conservation teachings helps to explain why so many population theorists embrace conservation teachings.

<sup>11</sup> Cf. also Schumpeter's "circular flow" in the absence of innovation and under competitive conditions.

<sup>12</sup> The clearest statement of the counter-argument is by F. H. Knight, who maintained that physical capital need not come into the model at all ("Issues in the Economics of Stationary States," *American Economic Review*, XXVI, no. 3, Sept., 1936, 393-411). This is equivalent to an assumption that resources and capital are indistinguishable as sources of income and that the permanent maintenance of income is a sufficient condition. The argument does not impress me, although it offers a concept of long-run equilibrium under perfect competition that is much easier to use. The acceptance of the Knight position leads directly to the statement by Scott ("National Wealth and Natural Wealth," this Journal, XXII, no. 3, Aug., 1956, 374): "As time proceeds, unless the depleted soil, mines, and inaccessible forests are improved by investment of savings, income will tend to fall. . . In the absence of technical change it is necessary to deep total (natural plus produced) capital per head constant in order to deep incomes per head from falling. As natural wealth per head disappears, produced capital per head must increase." Pigou (p. 26) discussed the derivative nature of real capital but concluded that for practical purposes, one should consider capital an original factor of production.

<sup>13</sup> See, e.g., J. Douglas Gibson, "The Changing Influence of the United States on the Canadian Economy," this Journal, XXII, no. 4, Nov., 1956, 431: "An illustration of the sort of fallacious thinking which militates against

effective discussion is the not uncommon suggestion that the Americans are making off with our wasting resources as though their use of these products would leave less for us in future. Except possibly over a very long period of time--too long to be of any interest to ourselves or to our grandchildren--this is a very doubtful proposition. As a practical matter the reverse is more nearly true, since the bigger the production the larger the expenditures for discovery and development and the larger the proven and usable resources. This is not always true of individual areas, but for countries the size of Canada and the United States it is not far from the mark." Gibson suggests, however (pp. 422-3), that a unique market is provided for Canada by depletion or the inability to expand discoveries at the required rate in the United States. The long run, for the United States, has not proved to be very long. In any event, there are peculiarities about reserves in mining which I hope to discuss in a subsequent note.

<sup>14</sup> Cf. the quotation from Scott, n. 12.

<sup>15</sup> For a discussion of obvious deviations of social and private costs and benefits see my "Comments on Conservation," *Canadian Banker*, summer, 1959. Perhaps the most obvious examples are: (1) Watershed protection and erosion control versus grazing and forest exploitation. (2) The smoke nuisance. How much does it pay to spend on a fume elimination system at a smelter? Fumes kill trees, but eliminating fumes is expensive. To complicate matters, the trees have a "social" value in excess of their market value because of the relation of forest cover to tourism, wildlife, recreation, control of run-off, etc. (3) Water pollution. Water is a major method of disposing of industrial waste. The effluent is in many cases more regular than the rate of flow of the rivers carrying waste. This is a serious problem, e.g., downstream from Edmonton on the North Saskatchewan River. (4) Town planning.

## RECREATIONAL LAND USE

ARTHUR GLICKSON

FROM "MAN'S ROLE IN CHANGING THE FACE OF THE EARTH"

EDITED BY WILLIAM THOMAS

Copyright: The University of Chicago, 1956. Published 1956.  
Fourth Impression 1962. Composed and Printed by  
The University of Chicago Press,  
Chicago, Illinois, U.S.A.

Reprinted with permission of the

UNIVERSITY OF CHICAGO PRESS,  
5750 SOUTH ELLIS AVENUE,  
CHICAGO 37, ILLINOIS.

### Origins of the Recreational Movement

A general survey of the origins of the problem of recreational land use reveals the following relevant stages of development of many industrialized countries during the last century or so:

1. Large numbers of peasants and peasant's sons gave up their ancient relationship to the soil and village, leaving their rural environment to concentrate in towns and seek employment in industries and services. Overnight, small urban or rural settlements grew enormously, both in area and in density of habitations, so that huge tracts of the surrounding landscape underwent urbanization. This expansion of urban political and economic power into the countryside and urban methods of production and commerce led first to a growing economic utilization of rural resources and later to a gradual deterioration of the rural and indigenous landscape by deforestation, mechanization of agriculture, parcellation, introduction of monocultures, faulty methods of cultivation, mining, and construction of industrial and power plants. Soil erosion, disturbance of the water cycles, and loss of fertility and of beauty of landscape are among the well-known symptoms of a man-made land disease.
2. The still increasing urban population, compressed in quarters where unhealthy conditions prevailed, remote from the open country, began to sense what it had lost and raised a demand for temporary environmental compensation. The rural and indigenous environment became for the urbanite a recreational environment. The peasant sons still wished to return to the country for a holiday. Gradually the need for recreational facilities to maintain the health and efficiency of the urban population became recognized. However, during the period of urban expansion the original cultural landscape had been largely defaced and turned into the "steppe of culture" -- as the Dutch call the new rural pattern. Only isolated parts--often spots of economic decay--had kept their original rural character.
3. Pressure of vacationers on the remaining rural and indigenous places and on newly established resorts became violent. This very pressure destroy-



ed these places as true resources for restful recreation. In the attempt to escape overcrowding and noise and to rediscover landscape, holiday-makers were driven ever farther away from the cities. Gradually, social and medical demands for recreational areas for the inhabitants of big cities became incompatible with the physical limitations of, or distance to, recreational land. The recreational movement of the population was hampered, and, as the crisis became obvious, there originated the problem of recreational land use.

The recreational movement should be considered as belonging to the wider contemporary phenomenon of population movement to and from the big centers --of spatial contraction and expansion of resources and commodities, of people and ideas. The most obvious and well known of these phenomena is the tremendous concentration of population and produce from the most distant regions in metropolitan and other big-city centers. In the dynamics of city life the demand for recreation represents a reaction against the psycho-physical complexity of life introduced by centralization and industrialization and reveals a tendency to reverse the prevailing spatial relations. It is an attempt to balance the centripetal concentration by centrifugal diffusion --by a temporary escape back to the places of natural and historic origin of the people: to the indigenous and rural landscape, the hamlet, the little town bypassed by modern development--in the hope of restoring, of "recreating," health, energy, and mental equilibrium.

We have little evidence of specifically recreational land use and facilities for preindustrial periods, because they represented a wholly integrated and therefore unrecognizable ingredient of environment. Private gardens and orchards, large public squares, the well, the streets, and the near-by surrounding rural landscape, all in the context of but moderate housing density generally, provided for the recreational needs of the medieval citizen. In ancient health resorts, such as Bath in England, Tiberias in Israel, and Epidauros in Argolis, people were not directly seeking relaxation and change but rather the healing qualities of air, water, and places. In comparison with our century, any recreational movement of former times was composed of a mere trickle of population, "confined to well-to-do folk and beset with difficulties of communication" (Abercrombie and Matthew, 1949, p. 141).

The appearance of a demand for recreation is evidence of the loss of environmental integrity. When residences become mass dwelling machines and factories become poisoned prisons, the "natural life" becomes an ideal. The ugliness of the places we pass through during daily life stimulates a yearning for purified beauty during a period of rest. "Natural" and "beautiful" become notions attaching to a part-time recreational existence. To compensate for these irritations, a new specialized function becomes a social need of city life and therefore the destiny of special extra-urban areas of forests, riverbanks, mountains, beaches, memorable places, as well as resorts: recreation, promising all pleasure, play, and adventure in a concentrated spatial and temporal dosage.

Recreation is not, however, confined to outdoor holiday-making, though this is at present its most conspicuous part. To understand recreational needs, let us for a moment consider recreation as a biological need, an ingredient of the rhythm of life: effort--relaxation, toil--leisure, routine--adventure. It has its place, then, in the life-maintaining functions in the same way as exhaling is necessary to the physical maintenance of life at any moment. The most important means to achieve recreation in this sense is considered to be a change of environment--we are inclined to say any change, the more radical the better. Whereas townsmen migrate to the open country and to the seaside, the farmer looks for recreation in the city. As a counterbalance to the daily way of life, people may search for recreation either in solitude or in crowded centers of amusement, either in closed space or in open squares. Because of this variety of individual demand for recreation, we include in any enumeration of recreational facilities establishments as different as a coffee-house and a park, a swimming pool and a historical site, a pleasure garden and a whole river system with its fishing and boating facilities, a holiday resort and a wildlife reservation.

The motives driving man to search for recreation in change of environment have not been sufficiently clarified. In many cases it is possible to explain recreation as an attempt to return to lost environmental values and ways of life. Among the most desired targets of such recreational return is the primitive life of hunting and berry-gathering--primitive in food, shelter, clothing, habitat--whereas people may content themselves also with rediscovering the indigenous environment in solitude.

It is also possible to assume that there exists in man a biological urge to employ his ability to change his environment. This ability, characterizing animal life generally, is even more the achievement of man, who can adapt himself artificially to varying environments; it is especially exhibited by urban man. But he has often little chance to exercise that ability in the daily run of life. The trend to move about reappears, then, as a recreational need. For we find recreation in just what we had to forego in daily life. To come in touch with different types of environment belongs probably in the same category of desires as the physical demand for a variegated nutrition and the psychic demand for variegated social contacts.

It might be possible to see a parallel between the motives behind recreational mobility and those behind nomadism. With the pastoral nomad, it is the low grade of fertility and carrying capacity reached by land after a period of pasturing which compels him to travel in search of unexploited regions. Similarly, a modern urbanite could be considered to be "undernourished" in respect to environment. The recreational movement, therefore, is a proof of the interrelation between man and his physical environment. We detect the importance of environmental variety as a resource of human life because we miss it, especially in our time characterized by the low quality of our artificial urban environment.

The need for recreation varies with the individual; it obviously depends on personal versatility as well as on the quality of his daily environment. To consider recreation as a human need in past, present, and future, we shall have to make a clear distinction between the normal demands for change of environment on the part of members of healthy communities and the abnormal recreational insatiability of modern men living compressed in cities which are not planned to the human scale and which time and again compel attempts to escape.

### The Recreational Crisis

#### Land Requirements of Recreation

Recreation by change of environment is a need felt in all the temporal frameworks of life: times during the day, the day itself, the week, the yearly seasons, and lifetimes. Though individual variations are huge, the life of man may be considered to be intersected by periods of recreation (or the desire for such periods) which help to revitalize the cycle of life, to maintain its rhythm by confronting man with change--different environment and food, association with different people or substantial isolation from society, different occupation, and a different feeling of progress of time.

In our civilization each of these types of time periods can be related in a general way to types of spatial frameworks which provide for the needed recreation of man: the family house, which has to serve recreational needs during parts of the day; the public gardens, squares, playgrounds, amusement and cultural centers, which provide for the daily and some of the weekly recreational needs; the city surroundings--with their parks, forests, rivers--where recreation will be sought by many on weekends; and the region in which one's city is situated, in which it should be possible to stroll about during different seasons of the year. Obviously, this series of time-space correlations with types of recreation can be further elaborated; for example, the "migratory periods" of youths and adults, striving to escape any environmental frame or to turn the whole of the earth into their recreational framework.

In town and country considerable tracts of land have already been reserved exclusively for recreational purposes, and ever more are being demanded. For certain countries the amount of space needed per person for recreation can be calculated on an empirical basis. These amounts are much larger than is general assumed. In an average European home planned for a family of four to five persons (about 85 square meters) at least a third of the built-up area may be considered to serve indoor recreation during parts of the day: leisure within the family circle after a day of work, play, or solitude in reading, writing, or meditating. During parts of the year recreation will also be pursued on additional private areas, such as terraces, courtyards, or directly accessible gardens, which in numerous quarters take up 40-50 per cent of the total land requirement of the neighborhood (Fig. 169).

Calculating the land areas needed per family, according to British standards, for public parks, squares, playing fields, and cultural and amusement centers, we again meet the proportion of approximately one-third (about 110 square meters) of the total land requirement of a neighborhood (Abercrombie, 1945, p. 114). The importance of such areas for physical health has often been emphasized. They are also socially essential; besides the bonds formed in an urban society by work and trading, these urban recreational areas are the places where community bonds are formed during leisure time. But in the space allotted to recreation it must be possible as well to find spots for solitude and rest.

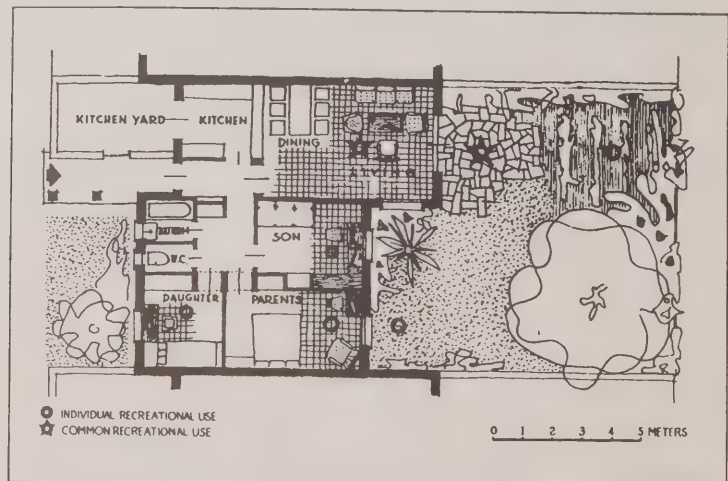


FIG. 169.—Recreational use of house and garden. The recreational problem generally has to be approached first by providing in the house the necessary recreational space for the individual and family.

Summing up, the land required for such a recreational program within a well-planned neighborhood amounts to more than 70 per cent of its total area. In comparison, the land needs for the "utilitarian" functions of working, shopping, circulating, hygiene, education, etc., are very small. Though this figure varies for countries such as England, the United States, Austria, Holland and Israel, we would say that the similarities in the different countries are more striking than the differences. The amount of urban land needed per inhabitant is tending to become uniform throughout the world, and it is possible to assume that equality of recreational needs, wherever these needs are recognized, is the most important factor making for the uniformity (Fig. 170).

No attempt has been made to measure the land requirement of modern townsmen for recreation on week-ends or during monthly or yearly holidays. The larger the scale, the more intricate the calculation becomes. Such



measurement would depend strongly, for example, on local climatic conditions, which might "compress" the yearly holiday period into a very few weeks of expected reasonable weather; on topographical and geographical conditions; on movability of urban population; on means of transportation; and on local custom.

The existence of great recreational pressure on land surrounding the metropolitan concentrations of population is well known, but no standards of land needs have been established. A hint comes from the Netherlands. In this densely populated and most intensively used land, natural areas amount to only 0.056 hectare per inhabitant (Buskens, 1951). That the Dutch complain of a definite lack of areas for week-end and holiday recreation within their country is an indication that the amount of recreational land has become insufficient for the needs of the population. In the United

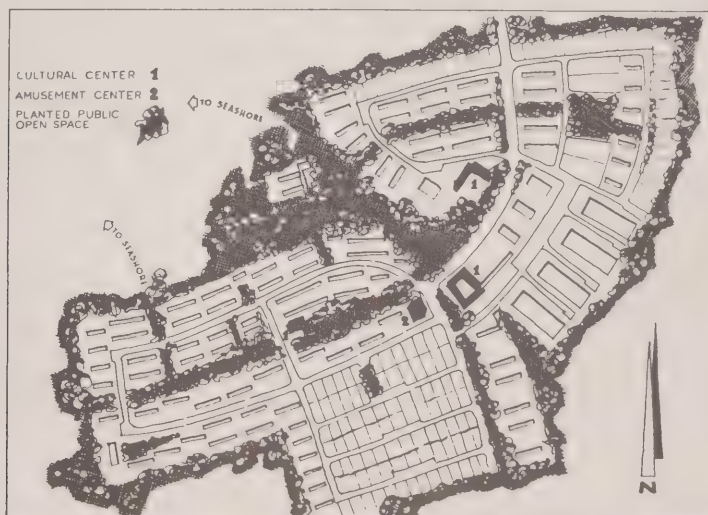


FIG. 170.—Recreational land-use planning in a neighborhood, Giv'at Olga, coastal area of Israel. Recreational areas of a neighborhood should constitute an integrated system of lanes and parks, situated so as to confront the urban inhabitant during the different functions of daily life. Green areas should contain segregated pathways as well as meeting grounds and through-lanes.

States the area of national parks, state parks, and national forests amounts to 0.6 hectare per inhabitant (American Society of Landscape Architects, 1954). And even that amount is, in the opinion of many American conservationists and landscape architects, wholly inadequate.

But are such figures of any real help in the calculation of regional needs? The safest assumption seems to be that the amount of land needed is very large. Surveys of demand vis-a-vis availability indicate that the need is still rising sharply. The present tendency seems to be toward a rapid increase in leisure hours and toward extending facilities and recreational areas accordingly. With the increase in population and the still growing congestion of cities, it seems that each new urban generation exhibits a stronger urge for recreation. On the other hand, motorization and construction of roads and airfields are making ever larger parts of the continents accessible for vacationers. To comply under these conditions with the theoretical needs for recreational facilities, huge districts--indeed, the whole of the regions surrounding large cities or even whole countries of high-population density--would have to be turned into recreational areas.

We may conclude that it has become impossible to provide sufficient land in the vicinity of most centers of population to serve exclusively for week-enders and holidayers. At the same time there is no way of suppressing the recreational movement into the countryside. Evidently, there-



fore, the quantitative aspect of the question of recreational land use on a regional scale cannot be seriously considered before going more deeply into its qualitative aspects: the motives for, and the means of, pressure of urban population on extra-urban land for recreation.

### Recreational Pressures

The provision of recreational space in the house, the town, the region, and the country is essential for the harmonious conduct of urban life; it leads to a proper dimension of cells in which individual, family and social life can take place, but it leads also to the securing of organic relations and harmonious transitions among these different levels of human association--the creation of a spatial rhythm of life. The daily, weekly, and yearly frameworks of recreation indeed exist in the strongest dependence on one another. Only if all of them can be provided for can the rhythm of individual and social life be satisfactorily maintained. The lack or inefficiency of one of them creates a direct pressure on the other. A slum is characterized not only by lack of space and obsolescence of flats or houses but also by hordes of children and adults escaping their dwellings and filling streets, courtyards, and gardens whenever the weather permits. Since they do not meet in properly dimensioned squares or gardens but, instead, are compressed in narrow streets or yards, the nearness of one to another stimulates friction, quarrels, and hate among the fellow-sufferers--proof of the fact that man, even urban man, needs a certain quantity of land under his feet.

A slum quarter, therefore, requires larger public gardens and squares, more public facilities of all kinds, than a healthy quarter; but, of course, every administrator and planner rightly prefers to invest money in the demolition of slum quarters and in their replacement with better houses rather than in the consolidation of slums by the establishment of public facilities. We know today that town planning depends on and begins with the planning of the basic cells of community life--the dwellings.

In many cases, however, town planning also ends with provision for houses and minimal amenities within a street or neighborhood. The towns of our century have inherited an immeasurable volume of incompatibilities--social, aesthetic, technical, and educational. With a very few exceptions our larger towns suffer from a huge deficiency in land areas for daily recreation, and none of the metropolitan centers meets the theoretical requirements for urban recreational land. We have to understand that this fact is the cause not only of poorly functioning towns but also of the heavy pressure of "land-hungry" urbanites on the rural countryside--for "Glasgow is a good place to get out of" (Abercrombie and Matthew, 1949, p. 130).

Similar to the process whereby erosion and floods result from the loss of absorptive capacity of the small particles of soil, the recreational movement on the country is the result of the obsolescence of urban dwellings and the lack of recreational land within the town. The recreation-searching masses turn into a "flood wave." We can assume that in many countries it is only that large portions of the population cannot afford a holiday far from the city which has preserved up to this time large tracts of landscape from final defacement and destruction.

On the one hand, our civilization requires ever larger areas of recreational land, but, on the other hand, we are making the landscape ever more uniform and limiting its restful and beautiful parts by maximum exploitation of resources. The violent result is the invasion by townspeople into the rural surroundings of the city on fine week-ends and holidays. Here a new conflict of interest between farmer and townsman has originated; the farmer looks upon the holiday-makers as pests--damaging crops, destroying fences, disturbing the cattle, burning the forests, and soiling the countryside. Indeed, a recreational area after withdrawal by its visitors is a wretched sight. But the townsman, on his side, considers the farmer an egoistic tyrant who meets his visitor grudgingly and tries to prevent his short week-end enjoyment.

The better the economic condition of the average town dweller, the greater becomes the problem of recreational invasion of the countryside. Eventually, the growing numbers of holiday-makers begin to constitute a nuisance not only for the country folk but also for one another. Trying to return for a holiday to primitive conditions of life, people meet or "surprise" one another instead of finding solitude. Overcrowding prevails, just as within the city. Recreation here, like the trip from home to the countryside and back, is a nuisance, often more strenuous than the daily toil. Every big city knows those spots in its vicinity where recreation means only a change from an honestly artificial urban environment to a specially manufactured "natural environment"--a change from the difficulties of daily life to the difficulties of Sunday recreation.

For a large part of the population, recreation is spoiled when it does not offer them a chance to escape from one another. Even in the United States, with its comparatively large areas of wilderness, a conflict is evident between the desire to put at the disposal of urbanites better recreational facilities and larger areas of land and the desire to preserve the natural countryside in its original state to make possible its solitary enjoyment by individuals and small groups (Feiss, 1950). The more artificial the urban environment, the larger the demand for compensation in indigenous landscape. But the most beautiful spots in a region are often kept a secret, because advertisement of them would mean their certain destruction by an influx of visitors.

The problem of recreational "inundation" of the countryside has to be tackled first of all inside the town by securing for the townsman the minimum measure of land he needs. A large part of his recreational needs thus would be met in his immediate environment, and the urge to leave the cities would be normalized. The whole character of outdoor recreation would be changed from one of flight from the city to one of harmonious movement of townspeople meeting their regional environment. But any such change for the better to be expected from town planning and development would not reduce the radius of travel for urban holiday-makers or restore the inaccessibility of rural and indigenous landscape. The same motives of social welfare which would encourage a community to enlarge its own recreational facilities would also induce it to prolong the yearly vacation of the average citizen and improve his chances of using that time for recreation outside the cities. In looking for a solution to the recreational problem, our main concern must be with regional development and regional design. We cannot expect a return to past conditions, and we are therefore compelled to turn our thoughts and energies to the comprehensively planned reconstruction of town and landscape as well as to the change of attitude toward environment.

#### Methods of Approach to Recreational Planning

The beginnings of land-use planning for recreation lay with those romantic lovers of nature who demanded the preservation of indigenous or rural landscape in the name of God, the nation, or nature in general. Their approach was defensive, and their fight actually was for the salvation of this or that natural area and animal species from the impact of techniques and industry and thus for its artificial separation from the landscape of modern civilization. For them the destruction of indigenous landscape was an indictment against our civilization, an offense against the wholeness of life.

We feel that theirs was a righteous cause; the rational arguments which they used to defend nature, however, were less convincing to businessmen and politicians. Investment in recreational facilities is by no means a good business proposition if such facilities are not intended for mass recreation. Nor could an expectation of greater manhour production as the direct outcome of the influence of landscape on human health and vitality be substantiated. Arguments concerning the loss of income of local hotels, gas stations, and other small businesses were employed as a last attempt to preserve the integ-

city of the landscape (American Society of Landscape Architects, 1952), but expectations of short-term profits through exploitation of land for lumbering, mining, and power generation always proved much more attractive.

The truth might be that for conservationists the very existence of wild nature is the real issue. By advocating the part-time use of landscape as an amenity, they tried to influence a utilitarian society to co-operate in the realization of their lofty ideal.

Given the existence of such mercenary interests, it should be considered a most fortunate achievement that conservation societies and outstanding individuals have succeeded in many countries in preserving limited areas of wilderness as nature reserves or national parks. Even in these the fight for preservation against industrial or agricultural interests, on the one hand, and against invasion by holiday-makers, on the other hand, has to be vigilantly pursued. It is no wonder, therefore, that pessimism is widespread among nature preservation societies (Clarke, 1946-47). They understand that stretches of wilderness are becoming museum pieces--exhibits to show the coming generations what they have lost. The rate of deterioration of landscape is still much faster than that of preservation, and the prospects of accomplishing by preservation a finer environment are indeterminate.

But, while the fight of the conservationists is directed against certain basic symptoms of environmental change, it does not touch on the man-land relationship as a whole, on comprehensive environment reconstruction. Positive goals of environmental health have to replace the defensive actions of conservators. As Patrick Geddes wrote in his *Cities in Evolution* (1949, p. 51), "The case for the conservation of nature must be stated more seriously ....not merely begged for on all grounds of amenity, of recreation, and repose, sound though these are, but insisted upon."

Out of the theoretical development of, and the still very limited practical experience in, regional and town planning, the most important conclusion to be drawn with respect to planning for recreation is the need for comprehensiveness. Land-use planning for recreation should be comprehensive in the geographical sense. For practicability, the interdependent recreational facilities of the house, the town, and the region have to be equally considered and provided for. The problem of recreational pressure on the countryside cannot be solved without providing first for the necessary recreational areas and facilities within the town. The same is true of planning for public open spaces in the town and the planning of individual houses and flats. On the other hand, the most efficiently planned town, containing a full quota of recreational facilities, is still a beautiful prison if its regional surroundings do not offer the town dweller an attractive and accessible environment. Ample recreational facilities should confront man in all the different spatial frameworks through which he moves; the problem cannot be partly solved, because the very compression of recreational land use into an insufficient framework negates the possibility of recreation.

Planning for recreation in regions and towns should be comprehensive also in the functional sense. As far as possible, the environment planned for functions such as working, trading, circulating, and dwelling should be recreational as well as utilitarian. To be effective, recreation has to be found casually in the factory at the hour of rest, on the way home, and at home. Vigilance with respect to the availability of recreational facilities should not be limited to a few zones or to the center of a city but should encompass the whole city--its houses, gardens, squares, and streets, providing at one place nooks for individual seclusion and elsewhere for excitement and pleasure in a social context. Recreation would thus represent one of the elements composing habitability.

To the numerous extant formulations of the aim of planning we would, then, add another: Planning aims at perpetuating recreation in all environmental frameworks. This implies that recreation should be part and parcel of the function of all land use and not only the destiny of specific chosen areas



-of land. It belongs to the planning program to turn town and country as a whole into a functional and aesthetically enjoyable environment.

When recreation is considered a part-time function of man, necessitating a specially treated, segregated environment, there occurs an awkward contradiction in the act of planning for recreation: the more one plans explicitly for recreation, especially on the regional scale, the less satisfactory the result. There are several reasons for this difficulty. A planned natural or historic environment in holiday resorts cannot fulfil the longing of many vacationers to return to the lost rural or indigenous landscape. Neither nature nor history can be "designed." Attempts to do so have led only to the fabrication of ridiculous junk--ornamental "prettification" in a money-making atmosphere--but not to any true environmental quality. Also, such planning assumes on the part of contemporary men a sort of contentedness with the existence of "utilitarian" land areas, the inferior environment of everyday, for which, it is further assumed, part-time compensation can be had by recourse to a complementary artificial recreational environment. The dual existence of discrete, ugly and beautified environment is thus perpetuated; it becomes the confirmation of the rupture between daily life and the good life, which is one of the marks of our big cities--the confirmation of a dualism which ought to be eliminated by planning.

Whereas the planning of separate zones for industry, through-traffic, and residence, as practiced today, seems to be in many cases a reasonable method, recreational zoning, as it is often proposed, may miss the very meaning of recreation: it is precisely the specialization of functions which upsets the equilibrium of man in the modern city and which should be balanced by variety--variety which recreation should provide. To become a true source of recreation, the whole of our regional surroundings has to be turned into an environment which provides for nourishment, occupation, interest, enjoyment, and health at the same time. Planning for recreation should be enlarged from compensatory or defensive zoning to planning for comprehensive purposes of higher environmental quality everywhere.

Summing up this short survey of the planning problems of the present recreational crisis, we present two statements:

a) It is impossible to provide for the theoretically needed amount of land for outdoor regional recreation if it is intended to be exclusively recreational land. Given the increase in world population, first call on land rests with food production, power generation, and industry--especially in the immediate surroundings of large population centers. Recreation, therefore, would have to be confined to the remaining "useless" wastelands, coastal and mountainous areas, or preserved stretches of indigenous landscape, wherever these happened to be located, and for as long as no economic importance was ascribed to them.

b) It is, however, not even desirable to develop a specific recreational environment on the regional scale for the part-time use of inhabitants of the large cities. Visiting such an environment may be a matter of social or erotic interest, of fashion or prestige, but it does not represent a true source of physical and psychological enrichment and renewal. The reason lies in the inevitable overcrowding, which, together with recreational specialization, should be considered as contrary to the essential recreational needs of metropolitan inhabitants. From the point of view of quality of recreation, we have to search for areas of basically functional importance--areas of indigenous nature, agriculture, fishing, pasturing, lumbering, etc.--where recreation would represent one of multiple uses for such land.

Our conclusion, therefore, is that the crisis of recreational land use can be solved only by opening up for recreational use the whole of a region. Nowhere should recreation be an exclusive function of an area; a landscape should be useful and beautiful at the same time--a resource of life and of its renewal.



But is it possible to expect the recreational need for rest and beauty to become the instigator of such a general reconstruction of landscape and environment?

### Reconstruction of Landscape

There is an intrinsic conformity of aesthetic and functional qualities of an environment, and in this conformity lie all prospects for recreational improvement. To be precise: not all functions create environmental beauty, nor is all environmental beauty functional; but quality creates conformity between them. This was most probably sensed by those nature-lovers who maintained that disfigurement of landscape meant also the decline of our civilization and life. But, as long as mechanistic concepts of land as a food-producing substance prevailed, that feeling found no material "nutrient," and aesthetic and recreational values remained widely separate from reality. Today the teaching of ecology, organic agriculture, soil science, and land-capability classifications are making conformity a scientific certainty. Now, indeed, "the case of nature conservation....can be insisted upon." The disfigurement of landscape is not merely a symptom but also one of the basic physical causes of cultural decline; it is the effect of a radical change in the relation of man to land and a new cause of human deterioration as well. It is a source of vital aesthetic and recreational dissatisfaction and at the same time a source of deficiency in quantity and quality of food, water, wood, climate, and habitability of the earth. The recreational crisis is part and parcel of the general crisis of basic resources.

Though industrial developments are closely linked with the rise of the birth rate in many countries, the landscape as transformed by industry is incapable of providing the nourishment for an increased population over a long time. It is a landscape of man-made erosion and of declining fertility--and other ever mounting physical problems. All the emphasis is on maximum crops and high profits within the shortest time and for a price which is to be paid by future generations. The land can be interpreted as being functionally degenerate. To secure a permanent basis of civilization, a further step, one of environmental reconstruction, is needed.

In the shaping of tools, houses, and even cities we have learned the intrinsic relationship of material, function, and form, brought to high expression in handicrafts, architecture, and city design. Now, recent developments in biology have made us understand the natural processes to a degree where we begin to recognize our immediate power over, as well as our final dependence upon, the ecological functions. The outstanding importance of our new biological knowledge lies in the fact that it sets us at the beginning of new enterprises on a larger scale, which may be called "reconstruction of landscape", "regional design", or, as Geddes put it, "geotechnics." This is a scientific enterprise as far as it is the observation and the emulation of nature's rule of return, and an artistic enterprise as far as nature leaves us the freedom, or even incites us, to express our developmental longings in the creation of higher qualities of environment.

The first realization of geotechnics--in the United States especially the Tennessee Valley Authority; in European countries the beginnings of afforestation and agricultural intensification, such as in Israel--as well as of the theory of landscape reconstruction, as developed in the last few years, indicates the changes in the cultural landscape to be expected: an increase in forests and wooded strips, an intensification and variegation

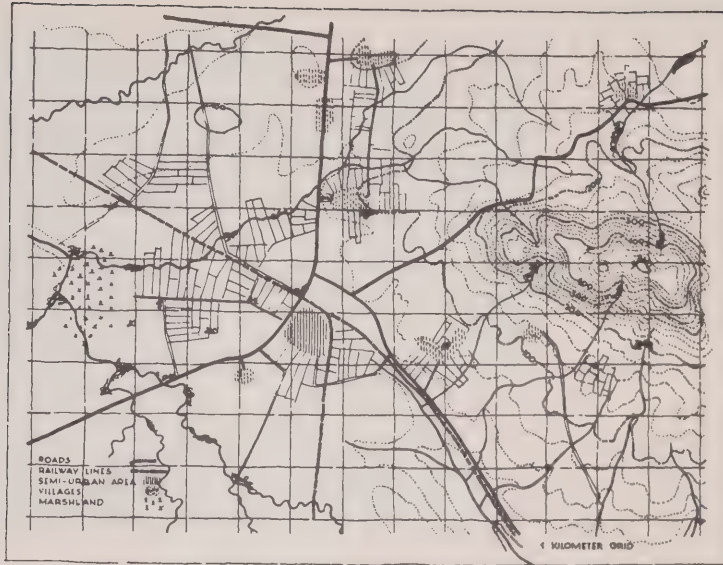


FIG. 171.—Existing condition—center of Esdraelon Valley, Israel. The lack of forests, wadies cutting deep into the land, marshland, and parcellation in long narrow strips are the symptoms of a landscape which is in a stage of functional and aesthetic deterioration. Intensification of agricultural land use and settlement and afforestation are leading to a gradual improvement of the landscape, i.e., greater fertility and habitability.

of agricultural land use according to soil capabilities, terracing and strip cultivation, the following of lines of natural contours or soil qualities in the delimitation of parcels and fields, and the bringing to an end of the grid pattern of fields introduced by the land surveyor and the real estate merchant. There emerges a reallotment and redevelopment of whole rural countrysides, as begun in the Netherlands and in other European countries--a far-reaching reorganization of the treeless "food factories" or of the abandoned eroded fields into smaller fields bounded by wildlife strips (Figs. 171-173).

The application of ecological principles of maintenance of soil fertility will lead in different countries to different landscape designs, because such application will be based on research into regional soil conditions and capabilities and human conditions. For many regions we can imagine as the result the creation of a pattern of freely curved wooded strips, traversing the plains in many directions, widening here and there into woods, running along streams and rivulets, and eventually connecting with the mountainous hinterland, where they would gain in width and finally merge into forests. The shady pathways, the rivers, and the forests of wildlife, for which people in many countries long, would again come to life--not because we should be ready to pay for recreation but because we should be obeying the scientifically recognized rules and preconditions for our permanent settlement and nourishment. Numerous planners have observed that in land-use planning on the regional scale recreation is always among the objectives "obtained.....as collateral benefits" (Blanchard, 1950). Game preserves would be kept not because of the unceasing endeavors of conservation societies but because "the cover needed for watershed conservation (would be).....restored to the drainage channel and hillsides" (Leopold, quoted in Graham, 1944, p. 170). A beautiful recreational landscape, as Sharp (1950, p. 67) has pointed out, "arose out of activities that were undertaken primarily for other motives, rather than that it was deliberately created for itself."

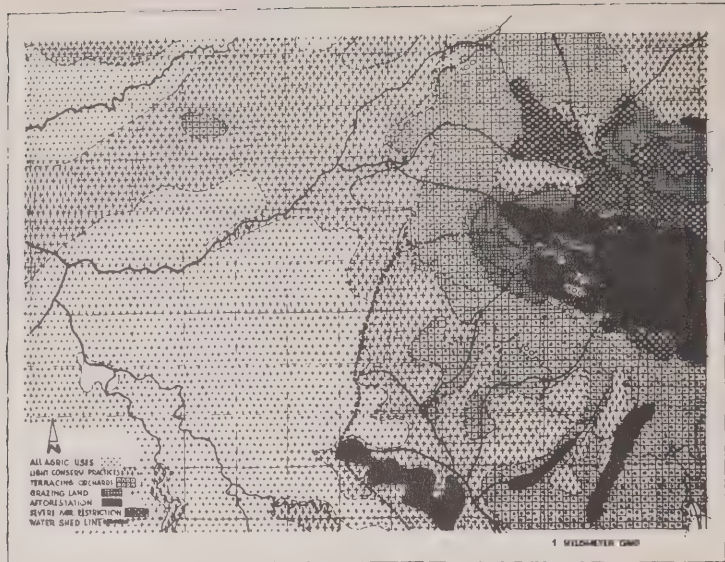


FIG. 172.—Soil-capability survey—center of Esdraelon Valley, Israel. The soil-capability classification, combined with the physiographic survey of a region, is the key to the planning of a new and better pattern of landscape.

We can imagine also an increase in planting along roads and trenches to avoid soil erosion and the planting of green belts around villages and cities to absorb the urban floodwaters, to minimize the range of influence of urban dust and smoke, and to create a harmonious transition of great recreational value from town to country. Green strips may converge on the cities and even penetrate into them. Here certain new trends of town planning, which have already found expression in several countries, conform

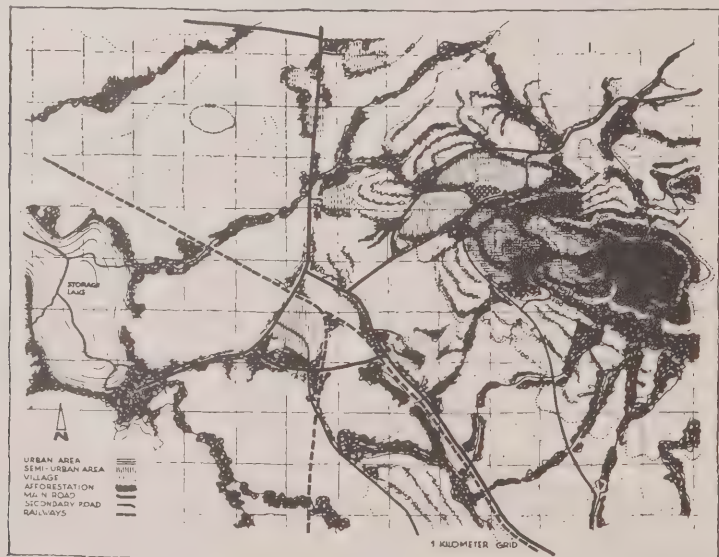


FIG. 173.—Landscape plan for center of Esdraelon Valley, Israel. The reconstruction of landscape can never restore the original untouched quality of land. It leads, by the application of ecological principles of land use, to a harmonious pattern of recreational and useful areas: wooded strips, lakes, terraces, and forests, with intensively cultivated fields and villages and towns in between.



entirely with the large geotechnical principles of reconstruction. In former centuries the formally arranged private garden symbolized in a way the conquest and taming of nature by man. The free design of public gardens during recent decades has been the next step and may represent a memorial which the townsman erects in the heart of his city to remind him of the lost natural landscape. It is a condensed artificial landscape in which a large variety of plants, as well as rocks and water, often represents the natural landscape "in a nutshell." In many new towns, however, a new way of designing planted areas has appeared; these designs admit, without much artificial treatment, a wedgelike penetration of the surrounding landscape into the center of the city. In this way an extensive net of green pathways subdivides the town in a natural way into the residential neighborhood units; it represents the most attractive and convenient route of communication among places of work, homes, shopping centers, and friends, and it joins with sports fields, playgrounds, and schools. Here recreation has been truly integrated into the whole of the functions of urban life, and there is no longer a need for obtrusively specialized recreational facilities (Fig. 174).

The new town no longer represents an isolated fortress, as in past centuries, or an agglomeration of houses alienated from its regional surroundings, as in the nineteenth century, but a regionally integrated nucleus of the landscape, from which open freely the channels which connect its center with the region and through which its lifeblood streams in and out. The function this pattern fosters and expresses may be interpreted as the mutuality of social and biotic life. The human communities of such a region can be strengthened only through the enhancement of its biotic communities. Its biological improvement, however, involves its aesthetic and recreational improvement.

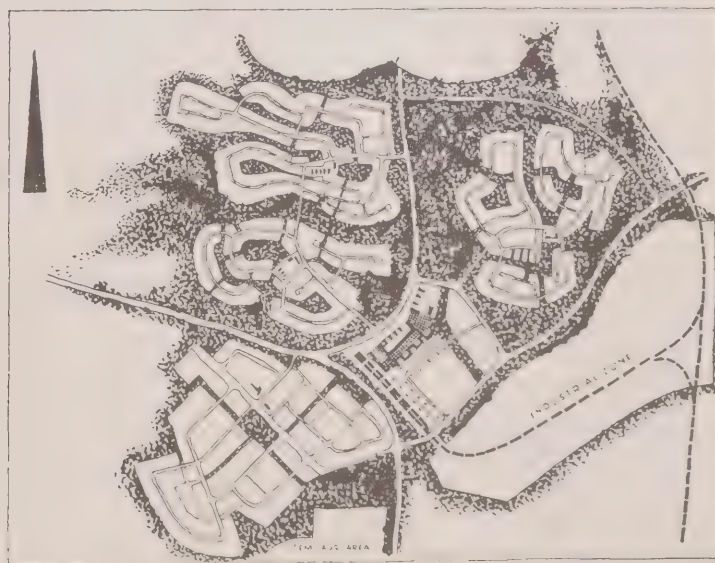


FIG. 174.—The new town of Beer-Sheva, Israel. The new town of Beer-Sheva numbers 20,000 inhabitants to date. Though the development of amenity is necessarily slow, the plan secures the future integration of the town with its regional environment as well as ample recreational facilities within the town.

Man has changed his landscape time and again. But all large-scale landscape design has been based on functional rather than aesthetic foundations. It may be expected that both "useful" and "useless" landscape will gain, by the new reconstruction of landscape, much of that "indigenous" character which is so valuable for recreation (MacKaye, 1928, pp. 138 and 169). But what does that indigenous character signify in this context?



It would be superficial to explain it merely as a return to a primitive past. "Indigenous" should be interpreted, as MacKaye has, as a quality of past, present, and future. As appeared in a recent memorandum of the (British) Soil Association, "The primitive environment was better, not because it was primitive, but because the rule of the natural biological cycle prevailed" (Anonymous, 1955, p. 77). In the same way recreation would be better, not as an attempt to return to the past, but as a way to eternally desirable values. The indigenous character of landscape which may result from application of scientific methods would be a confirmation of the quality of our work of reconstruction. That landscape would be a realization of our aspirations toward health and wholeness.

### Realization of Recreation

We began this essay by searching man for his needs and the landscape for its recreational resources; we found man's needs to be rising at the same time that the recreational landscape is deteriorating; only comprehensive regional reconstruction can restore the true sources of recreation. Now we have to look for the human resources for this tremendous enterprise which may be described as recreation of environment. Our problem has become reversed, and it is no longer possible to separate "recreation by environment" from "recreation of environment." Indeed, the very term "recreation" hints at this ambiguity: recreation means the revitalization of man's life by whatever circumstances, but it means also the restoration of life in man's biotic and physical environment. Recreating and being recreated--both are included in the original meaning of recreation, and, indeed, only in this double sense can it be realized.

We have dealt with the problem of recreation for the most part skeptically. As long as we are satisfied with expecting recreation from the environment, there is much room for skepticism. Hope begins when we deal with recreation in its active as well as its passive aspects. Such recreation loses the character of temporary compensation; it becomes a positive act of observing, enriching one's experience, widening one's interests, participating in the activities of communities, and developing receptivity for environmental qualities.

In our time we often meet the tendency to identify recreation with certain ways of behavior in free nature and in foreign places--a sort of planned emotionality and permanent enthusiasm. When we speak of "active" recreation, we aim not at the instigation of any such recreational enthusiasm but at positive purposes of recreation. Active recreation may become the voluntary preparation of the urban inhabitant for the geotechnical renewal of his region; it may be the first step--reconnaissance--in the long-overdue fight against soil erosion, declining fertility, and landscape devastation, aiming at the qualitative and quantitative enhancement of food-growing areas as much as of the habitability in town and country. This sort of recreation would serve the progress of regional survey of towns and country. As conceived by Geddes (1949, p. 157), it would renew our acquaintance with our regions, "rationalise our own experience", and prepare us for its planned change by widening our factual knowledge as well as educating us to a synoptic planning attitude; it would become "regional survey for regional service" (Boardman, 1944, p. 187).

Wherever attempts at land reconstruction have been made, it has emerged clearly that this is a multipurpose enterprise, involving agriculture, water supply, power production, industry, transportation, and population movement and geared to residential as well as recreational purposes. To be successful, such an enterprise has to be undertaken by collaborating parties of different interests. The rural forces alone are in our time unable to accomplish the task. Urban scientific and technical achievements have to be fully applied to the country to bring about afforestation, dam-building, terracing, drainage, planting, real-

lotment of land, and construction. If repair of the man-land relationship were to become the essential content of recreation, the recreational return of the urban inhabitant to the land would mean the beginning of mutuality of urban and rural land-use interests and of co-operation in planned regional reconstruction.

We can now summarize by forecasting three stages of environmental development beyond those set forth at the outset--though these represent no certainties but only postulates:

4. Urban man should realize that, when he conquered the countryside and created towns, he at the same time lost important environmental values. Forced thereby to search for his own recreation, he returns to the country. The more that industry and cities expand, the greater is the demand for recreation--but the greater also are the chances to realize recreation in its double sense by combined economic rehabilitation, social re-education, and physical reconstruction.

5. In the reconstruction of landscape co-operation between town and country and among professions would re-create a fertile and habitable environment. It would be the greatest enterprise of planned environmental change since Neolithic times and the best act of social creation we can imagine. With the help of science, man reconstructs nature in its own image, which is at the same time his own best image.

6. Acting toward these purposes, man would rediscover the land as an inexhaustible resource of human recreation; making such discoveries, he would at the same time regain confidence in his own creative capabilities. Recreation would then become means and ends in one--and the earth, a better habitation.

#### REFERENCES

'That Geddes used the term "geotechnics" is reported by Benton MacKaye in "Geography to Geotechnics," a series that appeared in The Survey, October-December 1950, and April-June, 1951. New York: Survey Associates, Inc.

Abercrombie, Patrick

1945 Greater London Plan. London: H.M. Stationery Office. 221 pp.  
(In this work important beginnings have been made to calculate the land needs of modern urban inhabitants.)

Abercrombie, Sir Patrick, and Matthew, Robert H.

1949 The Clyde Valley Regional Plan, 1946. Edinburgh: H.M. Stationery Office. 395 pp. (Chapter iii, "Open Space and Recreation," pp. 129-58, deals with the regional problems of recreation of the Clyde Valley and helps to clarify the problem of recreational land use generally.)

American Society of Landscape Architects

1952 "Selected 1951 ASLA Committee Reports: Public Roads, Controlled Access Highways, Parkways," Landscape Architecture, XLII, No. 2, 57-77.  
1954 "Selected 1953 ASLA Committee Reports: National and State Parks and Forests," *ibid.*, XLIV, 136-37.

Anonymous

1955 "The Dental Health of Children" (memorandum to the British Dental Association from the Soil Association), Mother Earth, VIII, No. 1, 75-80. London.

## REFERENCES (CONT'D)

Bentham, R. J.

1952 "The Development of Rural Landscape in the Netherlands," Journal of the Institute of Landscape Architects, No. 25, pp. 2-9. London.

1949 "Report of Documentation on Reconstruction of the Landscape in the Netherlands." (Unpublished lecture.) 4 pp. (In Bentham's articles as well as in his practical work the idea of the reconstruction of the cultural landscape of a densely populated country comes to a clear expression; it means improvement as a multipurpose enterprise, comprehending useful and recreational functions.)

Blanchard, R. W.

1950 "Master Land Use Plan for Crooked Creek Reservoir," Landscape Architecture, XXXVII, 140-41.

Boardman, Philip

1944 Patrick Geddes, Maker of the Future. Chapel Hill: University of North Carolina Press. 504 pp. (The life-story of the great biologist, geographer, educator, and planner is at the same time a forecast of the science of renewal of man--work and environment.)

Buskens, W. H. M.

1951 "Recreatie als Vraagstuk van Ruimtelijke Ordening," Natuur en Landschap, Vijfde Jaargang, pp. 21-29. Amsterdam.

Clarke, Gilmore D.

1946-47 "A Challenge to the Landscape Architect," Landscape Architecture, XXXVII, 140-41.

Feiss, Carl

1950 "National Park and Monument Planning in the United States," Town Planning Review, XXI, No. 1, 40-56.

Geddes, Sir Patrick

1949 Cities in Evolution. 2d ed. London: William & Norgate. 241 pp. (This book is the only publication of Geddes' numerous scripts on comprehensive planning. The more one penetrates into Geddes' ideas and formulations, the wider appear the horizons of the future in thought and action.)

Graham, Edward H.

1944 Natural Principles of Land Use. New York: Oxford University Press. 274 pp. (In this scientific work the importance of our new biological knowledge for a comprehensive change of the landscape becomes obvious.)

Jacks, G. V., and Whyte, R. O.

1944 The Rape of the Earth. London: Faber & Faber. 313 pp.

Leopold, Aldo

1949 A Sand County Almanac. New York: Oxford University Press. 226 pp.

1953 Round River, Ed. Luna Leopold. New York: Oxford University Press. 173 pp. (Leopold's nature descriptions are of a lyric beauty. They reveal a deep longing for recreation of man in nature's eternal ecological cycles. His philosophical and ethical conclusions represent the most essential and concise appeal to man as a "biotic citizen.")

## REFERENCES (CONT'D)

MacKaye, Benton

1928 *The New Exploration: A Philosophy of Regional Planning*. New York: Harcourt, Brace & Co. 235 pp.

1950 "Dam Site vs. Norm Site," *Scientific Monthly*, LXXXI, No. 4, 241-47. (MacKaye's ideas of indigenous landscape, rural and city life, the flow of population and commodities, habitability, and active and passive recreation constitute most essential building stones of regional planning.)

Mears, Sir Frank C.

1948 *Forth and Tweed: Regional Plan for Central and South Eastern Scotland*. Edinburgh and London: Morrison & Gibb, Ltd. 180 pp. (The chapter on "Recreation and Amenity," Part V, pp. 141-49, hints at the true extent of the problem).

Mumford, Lewis

1938 *The Culture of Cities*. London: Secker & Warburg. 530 pp. (The true importance of these interpretations of past and present environmental culture is revealed by the fact that they constitute a continuous stimulation for thought, criticism, design, and action).

Nixon, H. Clarence

1945 *The Tennessee Valley, a Recreation Domain*. (Papers of the Institute of Research and Training in the Social Sciences, Vanderbilt University.) Nashville, Tenn. Vanderbilt University. 22 pp.

Rainer, Roland

1947 *Die Behausungsfrage*. Vienna: Gallusverlag. 120 pp. (This book reveals in a very simple and convincing manner the quantitative and qualitative aspects of urban land use.)

Sharp, Thomas

1950 "Planning Responsibility of the Landscape Architect in Britain," *Landscape Architecture*, XL, No. 2, 67-72.

Taut, Bruno

1920 *Die Auflösung der Städte oder die Erde, eine gute Wohnung*. Hagen: Folkwang Verlag. 82 pp. (More than half of this book written by an architect consists of fanciful sketches of a reconstructed earth as a good habitation; the other half is an interesting collection of quotations from Kropotkin, Walt Whitman, Fuhrmann, Scheerbart, Oppenheimer, Tolstoi, and others--all on the subject of improvement of life and environment.)

United States Department of the Interior, National Park Service

1943 *Recreational Resources of the Denison Dam and Reservoir Project*. Texas and Oklahoma. Washington. D.C. Government Printing Office 98 pp.

Wrench, G. T.

1946 *Reconstruction by Way of the Soil*. London: Faber & Faber. 26 pp. (In this stimulating collection of Dr. Wrench's works, the agricultural political, and economic problems of many countries are treated at different historic periods. The problem of quality of land use clearly emerges as the central problem of all civilizations.)





**PART FIVE**

**THE ROLE OF PRIVATE AND PUBLIC INVESTMENT**

**IN**

**REGIONAL DEVELOPMENT**



## INDUSTRIAL AND SOCIAL CAPITAL

YVES DUBE, J.E. HOWES, D.L. McQUEEN

HOUSING AND SOCIAL CAPITAL  
ROYAL COMMISSION ON CANADA'S ECONOMIC PROSPECTS, 1957 (Page 1-3)

HON. WALTER L. GORDON, CHAIRMAN

Reprinted by permission of

ROGER DUHAMEL,  
QUEEN'S PRINTER,  
OTTAWA, CANADA.

If there is anything which chiefly characterizes a modern industrial economy, it is the possession of a large stock of capital assets - of houses, factories, warehouses, office buildings, dams, machinery and other facilities designed not to be consumed but to be a means, together with labour, of producing goods and services. The importance of such a stock to the achievement of a high standard of living is well enough illustrated by the eagerness with which so-called under-developed countries seek to increase the amount and variety of their capital equipment. Different endowment of natural resources have of course a most significant bearing on differences in national wealth, but natural resources without the capital equipment to exploit them are only potential riches, and by and large countries with high standards of living are also countries with relatively large stocks of capital equipment per head.

A capital asset may be approximately defined as something durable which helps to produce something else.<sup>2</sup> The something else may be goods or services; if it is goods, it may be consumption goods, or it may be another capital asset such as a machine tool or a pile-driver. It may be something which is sold, such as a refrigerator or a dry-cleaning service; or it may be something which is not sold. A church is a capital asset just as much as a factory: its "output" is, in strictly economic terms, a certain kind of service.

For the purposes of the Royal Commission's work, capital assets have been divided into industrial capital, housing and social capital. The present study is concerned with the last two categories. Housing is self-explanatory. Social capital is taken to include schools and universities, churches and related buildings, hospitals, roads and streets, airports, sewer and water systems, and other buildings and installations appertaining to public institutions and departments of government.

### Distinction Between Industrial and Social Capital

It has to be admitted that the above delimitation of social capital has been made partly with a view to statistical convenience. There are, nevertheless, some important respects in which most of the assets named differ from those which have been put by implication into the industrial category. The Oxford Concise Dictionary defines an industry as "a branch of trade or manufacture". In Canada, at any rate, the word "industry", when it is not being used to designate a personal quality, generally suggests an expectation of profit; and it is a reasonable presumption that the great majority of those assets which would here be called industrial are brought into being with the hope of making money - for a person or group of persons, for an incorporated company, or for a government-owned business enterprise.



Schools, universities, churches and hospitals, by contrast, are not usually built with an eye to profit. Fees may be charged in some cases, but rarely are they intended to cover the full cost of operation and capital charges. Some kinds of roads, notably provincial highways, may be charged for in the sense that part of all of the cost of building and maintaining them is recovered from motorists by way of gasoline taxes and motor vehicle licence fees, but the return is not direct, or is it always in proportion to the service rendered.

One cannot say, however, that all of what is here called social capital is distinguished by a lack of regard for profit: there are exceptions. Toll roads and bridges exist. Many town and city water systems are organized as self-supporting utilities, meeting their expenses out of user rates.

Perhaps it helps to clarify the nature of social capital somewhat if one inquires into its relationship to industrial capital and to industrial activity. Looked at from this standpoint, social capital would seem to play a facilitating role. While not itself industrial, it helps to make industry possible. Without roads, trade and commerce would be paralyzed; without schools, there would be no skilled industrial labour force. It is not through motives of benevolence alone that when large industrial enterprises move into remote or under-developed areas, they often undertake, on their own initiative, to provide a complement of social capital. Under modern conditions, the existence of a large aggregation of industrial capital without a social counterpart somewhere in the vicinity would be all but inconceivable.

Thus, when people want money spent on social capital, they will as often as not attempt to justify the outlay on the grounds of usefulness to industry. University spokesmen, for example, may suggest that a timely industrial donation now will yield good dividends of scientists, engineers and executives in the future.

But one of the most significant characteristics of social capital is that much of it does not require this kind of justification at all. Hospitals would still be built, even if it could be proved conclusively that they did not contribute a single extra revolution per minute to the wheels of industry. The main reasons for erecting churches, or community rinks, or concert halls, have even less to do with facilitating industrial production.

Indeed, one might argue that it is the industrial component of capital which is ancillary to the social, rather than the other way round. Industry and industrial organization are, after all, primarily a means to an end. But social capital and its associated institutions are both this and more. They relate, in part, to what is meant by civilization in the highest sense; they are worth having in themselves; they justify industry even as they facilitate it.

Would it be possible to say, then, that social capital consists of assets to which society attaches a special value quite apart from any apparent usefulness to industry? Unfortunately, one would be hard put to explain just why roads and airports should be accorded a species of accolade which is denied to railways. Perhaps a better definition is this: that social capital consists of assets for which society as a whole, through the medium of governments and other public institutions, desires to assume a direct and continuing responsibility.

<sup>1</sup> Inventories of goods stored up for later sale are also capital assets, but are not dealt with here.

<sup>2</sup> "Durable facilities used in producing, transporting, selling and servicing other types of goods and services". (Private and Public Investment in Canada, 1926-1951, p. 9, Department of Trade and Commerce.) An exception is made for a class of commodities which includes such things as domestic stoves and refrigerators and private automobiles. These are called "durable consumer goods".

# THE POLITICAL ECONOMY OF URBAN CHANGES IN CANADA

DAVID W. SLATER

QUEEN'S QUARTERLY, WINTER 1960-1961  
VOLUME LXVLL No. 4

Reprinted by permission of

DAVID W. SLATER,  
and QUEEN'S QUARTERLY  
KINGSTON, ONTARIO, CANADA

Two strands run through many of the current discussions of cities in Canada. First, there is a suspicion that Canadians face urban problems on a scale and with an intensity that are quite different from their past experience. Second, it is often suggested that the existing mechanisms and institutions for "city-building" are grossly unsuited to the task: in particular many observers argue that government must play a much stronger role in urban development in the future than they do now. This essay is mainly concerned with the broad questions of the appropriate roles of the state and of private economic arrangements in "city-building".

Around almost every point of public policy regarding cities, there is haziness and uncertainty at the moment. No simple clear consensus exists regarding answers to such questions as those which follow. Should urban transportation be arranged by road or rail; by governmental or private means; on a self-sustaining or a subsidized basis above, on or below ground; subject to what system of pricing? What are the jobs of urban redevelopment? Should these be carried out by private market arrangements or by public authorities or by mixed private-governmental arrangements? Should the dirty crowded tenement-housing and shantytowns which are associated with poverty be dealt with directly through public activities in housing, or should the poverty problem itself be tackled? Complaints are heard about the monotony and the inefficiency associated with the new mass subdivisions which sprawl around older cities. Are the existing arrangements for developing land and housing in Canada incapable of producing attractive, economical and socially effective housing arrangements except for the upper middle class and the rich? Does the solution lie in governments becoming the developers of land and perhaps the builders and owners of housing for a large fraction of the population? If the latter, are subsidies required? Given the long tradition of private property rights, how are we to preserve some elements of greenery around our cities? Should green belts be developed? The list could be expanded almost indefinitely.

The intention in this essay is not to deal with specific questions of public policy regarding cities; rather it is to examine the broad mechanisms and institutions that have been used to deal with urban growth and change. The search is for a general framework within which specific matters may be examined.

## I

### THE MARKET PLACE AS THE PRINCIPAL CITY-BUILDING MECHANISM

On this continent the development and use of urban land has been (and still is) mainly carried out by a decentralized private market organization rather than by governments. The "use of urban land" refers

to the original conversion from a rural to an urban lot basis, to the building, owning, and financing, of housing and commercial and industrial establishments; to the changes in the uses of structures and the land on which they stand, and so on. Historically the state, mainly through local governments, has provided a minimum of public services, such as fire and police protection and public schools: also the government traditionally have organized a modicum of social facilities in the form of streets, and for water and sewage disposal; these form the spine of the city. In principle the provision of or the approval of standards for such services provided a potential basis for shaping cities and for the regulation of private activities by the state, but more often than not such potential regulatory powers were not used in North America. Indeed a common story was of the powers of municipalities to provide and finance such social capital facilities becoming subservient to the interests of the real estate developer. Essentially then, a man could do almost anything he pleased with his private urban property. Large old homes could be converted into crowded rooming-houses; residences could be made into stores or factories; pieces of raw land of varying dimensions could be sold without the approval of any authority; a house or store could be build in almost any way and in almost any position on a lot, irrespective of what else had been built in the area. In fact, if not in law, an almost unbridled laissez-faire system characterized urban land use on this continent at least until the 1920's.

Real or alleged deficiencies in this approach were adduced a long time ago. In statements that are hauntingly like those of 1960, Al Smith in the Presidential campaign of 1928 pointed to American cities as one of the main problems that American capitalism had not dealt with successfully. Coleman Woodbury, who is now almost a senior statesman of American urban analysts wrote in 1929:

For a long time, the brilliant advances in technical scientific skill which have transformed city life blinded most observers to the avoidable wastes and losses which are now quite apparent to even a casual student of urban development. Laissez-faire policy can properly be charged with a large part of the enormous toll which congestion takes daily from business and industry, the disproportioning of urban areas among residential, commercial and manufacturing uses, the inadequacy of parks and playgrounds, the losses resulting from excessive shifting of districts from placing incompatible uses next to one another, the unwise speculation in urban sites which costs the families of small means millions of dollars annually, and the absence of amenities from the greater part of the residential section of cities - all features of urban conditions of the present.'

#### Limitations on the Job of the Market

The shortcomings of an unregulated private market mechanism for organizing activities in cities are considered later, but it should be recognized that the job to be done was a limited one, and that the system worked tolerably well in some respects and circumstances. First, many of the features of our cities are but a reflection of the general characteristics of our society; a laissez-faire approach to the organization of urban activities cannot be held responsible for such general characteristics. Our society generates and sustains considerable inequalities in the distribution of wealth and income; also our society holds the value of considerable freedom for the individual to use his wealth as he wishes. These two features are fundamental to the gradations of housing and land use in cities. He who can and will pay, gets; he who cannot or will not, does not. If the private market place spills out vast differences in the urban environment for the rich and for the poor, this is not a critique in itself of the real estate market nor of the activities of local government. If our society wants to



alter fundamentally the inequalities of the urban environment, only a basic alteration in the distribution of wealth or income will do the job. Second, there is an element of "big brotherhood" in many of the critiques of the market. People choose more automobiles and less housing, more liquor and tobacco and women and less parks and art centres and skating rinks, more expensive food and poor sewage disposal plants. And the urban market place and governments respond to these choices. Critiques of private choices and efforts to lead people toward improvement and their private choices and in their collective decisions are very useful in our society. But many of the social criticisms of the market places go beyond these - to the point that the critic is really arguing that he knows better than the people what the people ought to have.

Third, our cities are compared with the grand avenues of Paris or modern Rome or the gorgeous parts of Rio de Janeiro or the exciting new capital city Brasilia. The implication is that we have nothing comparable in the way of city-building of lasting worth and beauty. While there are many ugly features of our cities and while much of our city-building is of only transitory historic interest, it should be remembered that it is not all this way. Some of the great parks in American and Canadian cities were put together by the efforts of private and governmental leadership in days when laissez-faire was even more rampant than now. All over Canada one can find mixtures of good and bad city-building - good high schools and bad ones, good public libraries and bad ones, surprisingly good art centres and horrors, fine transportation arrangements and poor ones, exquisite buildings and monstrosities. Individual efforts of leadership have made the difference. The classic city beauties of Paris and Rome, Rio and Brasilia and many of the beautiful old middle Atlantic towns in the United States are the products of autocratic or feudal or aristocratic societies.

#### The Economics of Urban Land Use

The theory of the market place as an organizer of city activities is fairly simple in general outline. Any piece of property when combined with existing or altered sets of improvements may be used in a variety of ways--for shopping, storage, industrial plants, or various qualities of residence. Given the technology of the day, the availability of capital and of people, the levels and distribution of wealth, and the choices of people about spending their incomes, each alternative use of a property will have expected values. The use that wins out will be that which yields the highest value to the owner. Some writers take the next step, to assert that the market operating in response to these choices will produce an economically efficient structure of cities and one which is altered tolerably well to suit changes in the underlying data of a city. For example, if the population of a city grows, subdivided land will become scarce and more expensive, and new subdivisions will be brought into place; if too much land is being subdivided the price of lots will decline, slowing down the conversion of land to an urban status. If, through improvements in transportation and higher standards of living, the public demands more land per residence, then the market will produce this pattern. If more commercial facilities are demanded, then it is asserted that the market will produce these in approximately the right amounts, forms and places. Some writers go on to allege that the system produces good results not only economically but in other social regards. In other words the basic case for a laissez-faire approach to the economic and social organization of cities is the same as in the organization of agriculture, the choice of fields of work, and the amounts and ways in which automobiles or coffee pots or cheese are produced and distributed.

#### The General Case for Public Intervention in Regulating Land Use

The case for a complete laissez-faire approach to the production and distribution of goods and services and the distribution of income has long been recognized as unsatisfactory; e.g. the determination of levels of



employment is accepted as a concern of social policy. The state intervenes to improve markets which are imperfect, to place limits on the exercise of monopoly positions, to modify the distribution of wealth and income which the market mechanism tends to generate and in many other ways. But one may very well ask why it is that the state intervenes much more actively now as regards urban land use, housing and transportation, than it does with respect to the purchase and use of television sets or refrigerators or liquor? People are told that they may or may not subdivide land, they may or may not place housing of certain sorts in certain places; they may only use their automobiles under certain conditions and so on. What I am suggesting is that social interventions in the markets which organize urban land uses are more intense than in many other markets and presumably there is a case for this.

The fundamental point about urban land use is the interdependence of one use on another. Actions with respect to a particular land use influence profoundly the outcomes of the uses of other pieces, and vice versa. Thus if a commercial venture is set into an established residential area, the value of existing residential uses is altered; on the other hand the development of a residential area alters the value of potential commercial properties which are in or contiguous to the residential area. The development of a new transportation artery alters the value of land which it serves for various uses. Interdependences in these senses are not nearly as important elements affecting the outcomes of particular actions in the purchase and use of television sets or refrigerators or the use of cigarettes. The interdependence of urban land uses is the fundamental basis of governmental intervention in the market processes which organize the use of land in cities. No individual can protect his own interest by himself.

Another aspect of the matter is almost as important. The most important feature distinguishing cities from rural villages is the combination of size and density of population and the wealth that makes possible (and often requires) a package of urban services, such as running water, sewage disposal, transportation facilities for people and goods, mail delivery and so on. Most of these services can only be provided economically if a single enterprise provides a particular service over large segments of the urban area. Monopoly positions are thus inherent in the provision of many urban services and some mechanism must be found to assure that the collective interest is served; regulation of franchises or the development of governmental enterprises results. Also, the provision of urban services creates urban land use values; windfalls are created for some private land holders as a result of the provision of particular urban services in particular areas. Collectively these may be offset by losses to other private holders of land, either because their land has become less valuable as a result of the new land development, or because of the value of their land was premised on urban development which does not take place or at least not as quickly. Many students of these matters believe however, that the development of urban services is a net creator of urban land values beyond the immediate costs of providing the specific services. The point here is that both the utility aspects and the modification of the structure (and perhaps the level) of urban land values represent bases of social intervention in a private market mechanism.

Another basis for social intervention in the markets organizing urban land use are the extreme imperfections of the markets in some respects and circumstances. First there are the imperfections of knowledge. The individual property owner is usually an amateur; the knowledge which he may possess about the nature of his property and its potential value is comparatively slight. Even with the best market organization which is possible the market would still throw up anomalies. The imperfections of knowledge also provide opportunities for misrepresentation. The real estate broker is in principle the means for bring an expert professional knowledge to bear on the land-use market. Unfortunately, in the past, a large fraction of the land developers and real estate organizations consisted of people whose motto was Barnum's "A Fool is Born every Minute",

of people who were professionally first cousins to pedlars of phony mining stock. House building and house repairs have also been activities notorious for bilking the public. Markets in which there are great imperfections of knowledge do not work very well and it is not surprising to find social intervention in such circumstances. A National Building Code and systematic governmental inspections of new structures to see that they meet some minimum specified standards bring some expertness to bear on the quality of the housing constructed. Tight legal obligations on the subdivider of new land provide restraints on misrepresentation and fraud, as well as serve other purposes; it has become relatively easy to determine what rights and services attach to the property one buys, and what restraints on the use of contiguous property exist. Attempts to license and professionalize the activities of real estate brokers are also directed in part to improving the honest, expert, broking function which is so terribly important in a market dominated by amateurs.

The land-use market has reacted in a very sluggish way to changes in economic circumstances in the past. When a scarcity of serviced land or structures has appeared, it usually has taken quite a long time to substantially increase the supply; the process of increasing the supply, once started, seems to carry on more or less according to its own inner dynamic. Thus quite frequently the increases in supply continue for some time after the scarcity has disappeared generating an excess supply which is comparatively difficult to digest. Land prices, the prices of structures, and rentals tend at first to zoom upwards and then, in the situation of oversupply, to zoom downwards. The typical story has been of great instability in rates of development of urban land and structures and of even greater instability in the prices of urban land and structures. The last century and a half on this continent provides a story of real estate booms and collapses over and over again. These instabilities have their origins in the general forces which produce long cycles in economic development. However these forces have had a peculiarly severe impact on the markets in urban land and structures. Ease of entry, imperfections of knowledge, uncertainty about the state of the market, a considerable gestation period between the initiation and the realization of efforts to increase the supply, the durability of the goods and the short-run irreversibility of changes in supply - all of these appear to play some role in generating the instabilities or in producing unusually serious instabilities in land development when they are generated by broad economic changes. Premature subdivisions were one of the worst results of these instabilities. In the 1920's for example many North American cities had half again as much subdivided urban land as was then used. Much of this was serviced using municipal credit. Most of the land was heavily mortgaged, yet priced at highly inflated figures. When the bubble broke persons with small equities in their land holdings lost all; the municipalities could not collect the tax bills, the complicated inter-lacing of mortgage arrangements became almost impossible to untangle resulting in a maze of clouded titles. The form of subdivision was often out of step with the type of land use later required. This pattern of prematurity has been repeated many times in North America.

## II

### THE RÔLE OF GOVERNMENTS

#### The Role of Governments in City-Building in Other Countries

In most countries governments play a much more active role now than they used to as regulators of the private market processes which develop and arrange the use of urban land and as direct participants in this process. At the one extreme, in some of the Scandinavian countries and in Germany there has been a long tradition of governments being essentially the urban landlords and thus having a strong power to shape the cities; private activities in building and owning and leasing property exist in these countries but the range of city-building carried on by private market arrangements is much more narrow than it is on this continent. The British

position appears to be in-between the Swedish and German arrangements on the one hand and North American arrangements on the other. In the first place the provision of urban roads, water and sewage facilities has long been a governmental function; this power of creating the skeleton of cities has been used fairly vigorously in the United Kingdom to shape the cities and to control the private market place. Secondly, zoning and subdivision controls have been used for more than fifty years in the United Kingdom as a regulation of the private market place. Thirdly, for a substantial proportion of the housing, the local authorities have been the land developers and the builders, owners and lessees of buildings. Many of the most attractive developments of land use, particularly of low-rental housing in Europe, have been substantially subsidized by the government purse. Fourthly, partly as a response to war damage to cities, and partly because of the general case for state intervention in urban redevelopment, governments have been active (though not necessarily continuous) participants in the launching of urban redevelopment schemes. Fifthly, the state has been the active builder of new towns in the United Kingdom. Finally, the state has designated areas as green belts, denying to the private property owners the right to shift the use of their land from its present use except to a limited range of approved green belt alternatives; and all this without (or with quite limited) compensation for the modification of private property rights.

In the United States there has been an aggressive experimentation with various governmental devices to regulate land-use markets and a considerable development of state enterprise. This is particularly interesting because the issue in the United States was for a long time in rather doctrinaire terms, as a socialism versus capitalism one. The "muckraker" literature showed American cities as incredibly bad places, the product of unholy alliances between slum landlords, big business, machine politicians, criminals, and bribery-ridden police forces and civic administrations. During the first world war and in the 1920's, civic reform and the improvements of the slums were treated as important issues, not only in themselves, but as a base for a healthy democratic capitalist society. Voluntary efforts at civic reform were very energetically launched by leaders in business, education and the church; semi-philanthropic efforts were made by some business leaders to provide decent housing to replace the worst slums. Zoning laws were introduced into a large number of American cities; the first notable comprehensive planning studies of American cities were produced. The driving force behind these (largely voluntary and semi-philanthropic) reform and reconstruction efforts was the idea that American capitalism would really show that it could clean up its own house; that it could produce good cities as well as huge volumes of automobiles and skyscrapers and machine tools. Whatever the chance for this approach to succeed in times of prosperity, it had little chance with the advent of the great depression. The United States turned toward more vigorous planning, public housing, public activity with respect to private housing, federal, state and local regulation over land use, tightened controls over subdivisions, and limitations on the use of municipal finance to support real estate speculation. As it turned out, these steps did not make the United States into a socialist economy; rather there developed in city-building and urban land development and use a sort of mixed-economy blending private and governmental activities.

The emphasis in the United States has been on regulation and shaping of the environment within which the private market works rather than government enterprises as urban landlords. Limitations on the use of private property have been developed, without compensation to the owners of the private property rights, under what is called the police power, a power to regulate in the broad public interest. Also, more vigorous use has been made of rights of expropriation being for public purposes. The big change in this respect during the last three decades has been a broadening of the range of public purposes for which the power could be used; this broadening has depended on gradual change in the interpretation by the American courts of "public purposes". Perhaps



even more important has been the use of the power of the public purse to regulate and shape urban land uses in the United States, and the particularly strong hand played in this regard by the federal government in United States. In order that a house-purchaser may qualify for the federally-administered mortgage insurance, his house must be located in a subdivision which meets certain standards laid down by the central government. The Federal Roads Programme has a large urban highway content and a profound influence on the shaping of the larger cities. The federal government has been the driving force in the reorganization of the house mortgage market, which indirectly has contributed so greatly to reshaping American cities. These are but three examples of the use of the central government's purse as a regulatory device.

#### The Role of the Private Market and of Governments in City-Building in Canada.

In Canada the role of the state in influencing land use is very much less than in Europe and somewhat less than in the United States. However, government influence on city-building has increase very greatly during the last twenty-five years. Every province now has urban planning legislation and some control over subdividing; most local communities influence land use through the zoning legislation. Municipal credit is used much less frequently now to install local services. The various National Housing Acts have brought about a virtual revolution in the terms on which new home ownership may be initiated, though the mortgage insurance arrangements of the Central Mortgage and Housing Corporation have been little used as a regulatory device so far. In quite a number of cases, federal-provincial land assembly projects have been the developers of new urban land--that is, the state has replaced the private market as the developer of urban residential land to a limited extent in Canada. Both federal and provincial arrangements are available in support of rental housing; the most commonly used element of these has been the public support of private projects by loans of funds at less than market rates of interest. A few pilot projects in public housing have been carried out, some of these with an explicit subsidy and others with minor hidden subsidies. Resources have been made available to finance urban studies. Expropriation procedures have been used in a few cases for urban development and redevelopment projects. Also a beginning has been made on publicly-supported urban redevelopment schemes, through acquiring, clearing and reselling land.

Despite all the efforts at improving the urban environment, very serious criticisms have been heard recently of the city-building efforts in Canada; suggestions that planning has been a failure; other suggestions that more vigorous positive planning and governmental action are required in order to improve our cities,

### III

#### THE PERFORMANCE OF THE REGULATED MARKET IN LAND USE IN CANADA

A main theme of this essay has been that some of the fundamental shortcomings of an unbridled laissez-faire approach to "city-building" were recognized quite some time ago even in Canada. Most of the urban development during the last twenty years in this country has been in a mixed-economy framework of regulated private enterprise. The criticisms of our performance during the last two decades thus fall substantially on the governmental apparatus. Two possibilities exist: the circumstances of urban growth during the last twenty years may have been unusual and thus the apparatus of regulation (which might be quite satisfactory in normal times) has not had a decent chance to work; or, the apparatus has been at fault. If one accepts the second alternative, it follows that a revamping of the apparatus or a replacement of regulated markets by public enterprises may be required.



In judging the effectiveness of the regulated market development of Canadian cities during the last twenty years, it is very important to remember the circumstances. At the end of the last war, Canada started off with a poorly-housed people in cities that were poorly-equipped with social capital facilities; many of the cities were one-man administrative shows. The run-down state of our cities was the result of many years of neglect during the great depression and six years of postponement during the war. The requirements for urban housing and services had been masked by the depression and by wartime diversions of consumer incomes. Even if the urban population growth after 1945 had been no larger than it was in the fifteen preceding years, there would have been a massive job of creating housing and developing cities and city services after the war. In fact the pace of urban growth was twice as high in the fifteen years after 1945 as it had been in the fifteen years before that year. The growth in the urban use of automobiles was even more rapid. In the circumstances one could hardly expect to create an urban environment which was vastly better than that which existed in the past.

Fortunately Canada had developed something of a governmental apparatus between 1935 and 1947 to aid and control the urban developments. Most provinces had planning legislation which provided a basis for control over the development of subdivisions, the development of official plans and the exercise of zoning controls. The Central Mortgage and Housing Corporation had developed a pattern of joint government-private financing of ordinary residential housing, and some schemes for the encouragement of controlled rental or low rental housing. The National Housing Code had been developed and it was adopted as the standard of building restriction in many municipalities. The Central Mortgage and Housing Corporation had developed and popularized a set of economical housing designs; however much one may object to these, they at least meant that a larger fraction of Canadian houses were professionally designed. Also, fortunately, out of the economic experience of the war, the financial position of most municipalities was markedly improved; and thus, following the rules of thumb of municipal finance, the municipalities had the capacity to undertake and finance many renovations and extensions of municipal services. Also, fortunately, the principal lending institutions which finance housing held much less than their normal complement of mortgages at the end of the war, and they were very interested in expanding their mortgage portfolios, particularly as the government participation in such financing had removed the bad taste that had developed in mortgage markets in the 1930's. After a somewhat slow start in the early post-war years, the investment in housing and municipal services in Canada increased substantially and a tolerably creditable job of city-building took place.

However much one may criticise the operation of the planning apparatus and the housing markets and the governmental arrangements that have some responsibility for city-building, it should be recognized that the Canadian job of city-building after 1945 was better than in most like circumstances in our past. The circumstances were ripe for a wild speculative boom in the development of urban real estate and the subdividing of land; this was certainly the typical performance in such circumstances in the past. The booms in the past were followed by collapses in urban development, in foreclosures of mortgages and the 'voluntary' giving up of property in an effort to settle debts, in heavy volumes of uncollected taxes, in cloudy titles and so on. While there have been considerable appreciations in the value of urban real estate during the past fifteen years, there has been nothing comparable to the wild speculations of the past. Nor has there been anything like the same proportion of jerry-built housing put in place as in like periods of urban boom earlier in our experience.

## A Change in Public Policy Regarding Cities.

Even when allowances are made for the extraordinary circumstances of city-building during the last fifteen years in Canada and when recognition is given to the successes of the planning and other governmental apparatus, there still remain questions of modification of public policy. Our city-building has been sprawly and lacking in amenity; congestion has increased; gross imperfections in the market place remain; the redevelopment of older sections of our cities has been neglected. Does a general case exist for more rigorous regulation of the market place and for much greater use of public enterprises in place of a regulated private apparatus in city-building?

This writer finds little value in a doctrinaire approach to such a question. To justify a position by adducing that it is the free enterprise approach is no argument at all; the question is one of the suitability of the method to the job. I believe that those jobs of city-building which are done tolerably well most of the time by an unregulated private market mechanism should be left to such a mechanism. Those jobs which the market, as it stands, does not do very well or not well very often, should form the basis of social intervention. The intervention should first be an effort to improve the market or the environment within which it works so that it may work tolerably well. Where, after experimentation with improving the market or when a very strong a priori case or comparative evidence indicates that the market, regulated or unregulated, may not do the jobs of city-building well, then we should frankly use a state enterprise. The problems then arise of providing some means of assuring a tolerably decent performance in economic, social and political respects, on the part of the state enterprise. This general philosophy is based on the idea that the jobs to be done in city-building are extraordinarily complicated and changing over time; a governmental administrative apparatus does not do these jobs well, at least not within a framework of a rule of law.

The approach suggested is not a simple one, for it implies that we must find out what jobs of city-building are done well and ill by various means; it implies that the rôle of the market and of government activities will be quite different in some circumstances than in others. This may be illustrated by considering one area of controversy over the existing institutional arrangements, that dealing with the development of new urban land.

### Land Subdivision as an Example

One of the principal points of controversy over the role of governments and of private market is in the development of new urban land uses, including the subdividing of land, and the ascertaining of uses of the land. Woodbury suggested that an unregulated laissez-faire approach would produce poor physical layouts, a lack of amenity, prematurity, excessive amounts of commercial land, ribbon developments, mixtures of conflicting uses, excessive shifting of uses and of property values and so on. The exclusive subdivisions which were developed in the 1920's for example, by large development companies with a continuing interest, with carefully developed deed restrictions, were the principal exceptions to these allegations. By the end of the 1920's it appeared that the free enterprise approach to city-building could do a good job of developing urban land uses for the rich, but for nobody else.

As to the current situation in Canada, the Report of the Committee of Inquiry into the Residential Environment operating for the Royal Architectural Institute of Canada is very enlightening. One might presume that with the development of zoning laws, subdivision controls, and the growth of official plans and planning officers, and the improvement in mortgage markets and the research and design activities of CMHC, most of the old ills of urban land development would be cured. Some have been, but the RAIC inquiry suggests that many deficiencies still exist. They complain of the monotony of our new subdivisions, of the sprawl, of the

absence of amenities. Clearly something more than negative planning is required. The Architects Inquiry found many subdivisions which were poor and some that were good examples of design; they asked what conditions accompanied the latter but were absent usually in the former. A necessary but not sufficient set of conditions for good design of new urban land uses included, in their opinion, development in comparatively large units by organizations that were in the business professionally with the intention of continuing such activities for long periods of time; imagination and careful planning by the subdivider, having regard to services, schools, the siting and mixing of houses, considering the subdivision as a whole. These conditions have not been present very often.

The RAIC inquiry suggests a much more vigorous use of government land assembly arrangements in the future; that is, of state enterprises to replace the government-regulated private enterprises as the developer of new urban land. In effect they are saying that the efforts to produce a reasonably decent job of city-building in the development of new urban land and new housing by means of regulating the private market are a failure; though they may have cleaned up some of the old ills of the laissez-faire approach to urban land development, they have not dealt with the whole of some minimum list of jobs, except for the rich, who, presumably can take care of themselves.

Let's look at the land assembly approach, for it presents most aspects of the general problem of state versus private activity in cities. First, the land assembly schemes put governments into the position of acquiring, planning, subdividing, servicing and selling urban land. Such projects are mainly to serve families in the middle ranges of income. Second, the objectives are mixed ones. In part the conception is that the land assembly approach can do a better job in developing land for people in the middle ranges of family income than the private market can do. Because the projects are sizeable ones, with a continuing interest on the part of the development authority, more thought and concern is given to the design of the layout than a private developer may give. Presumably, because of the participation of the local authorities in land assembly projects, the choice of land to subdivide and the layout and servicing may be made to fit better into the overall pattern of city-development. Most important, however, serviced residential lots may be cheaper than under private developments; this mainly depends on the land assembly project obtaining control over raw land on favourable terms; that is, governments have to take speculative positions in undeveloped land. Third, most land assembly projects are subsidized. Much of the apparent cheapness of lots in a land assembly project is due to the subsidization. Public authorities may acquire land at one point of time and develop it much later; they do not charge interest on their investment in the raw land as a cost to the land assembly project. Land assembly projects are mainly financed by the use of the federal government credit; the interest rates on the capital costs of development are thus much less than the comparable rates which the private developer must pay. Much of the efforts of design of the subdivision, organization of the venture, and sale of the lots are supplied by governments to the land assembly projects at no cost or at a nominal cost.

A case may be made for subsidizing land assembly projects for the middle income groups of the community, but let us be clear as to what we are doing. This writer would prefer that land assembly projects be not subsidized. The state might very well be a speculator in urban land, selling land assembly lots at market values; if they make profits out of such schemes, the returns could be used to meet some of the indirect costs of urban growth and to improve public facilities for the whole community. Fourth, the land assembly projects are an interesting mixture of public and private activity - usually the government participation is limited to developing and retailing building lots on which individuals build houses through private channels. Is the monotony of the housing less; its physical structure and appearance better; the sense of community more developed in land assembly arrangements than in private developments?



It is very hard to know for sure. Certainly, land assembly arrangements do not produce universally good and attractive housing. Some streets may be charming and attractive and others a mess. There is, in general, more variety in the housing than in a builder's tract, but that is about all. Finally, even if the land assembly projects thus far have been a moderate success, it does not necessarily follow that their extension would meet with equal success. Such projects have represented a small fraction of the urban land development; they have served a very useful rôle as examples of thoughtful planning and as a public counter to urban land speculation. But if the bulk of the urban land was developed in this way, the results might be quite different. In this country the real drive for such ventures is federal and that is the source of finance. But the responsibility for local government and urban land development is provincial. Federal-provincial-local partnerships have been the vehicle for land assembly projects; but the compromises involved, and the reluctance of the federal authorities to make an effective use of their powers has resulted in a rather flabby, lowest-common denominator approach to such projects.

#### A Final Note

The development of new urban land is but one example of the various tasks of city-building. I believe that an excellent case exists for increased use of the land assembly schemes as a technique of developing new urban land, though some deficiencies have been suggested in the current use of the technique. For each other major field of city-building I suggest that much study of the existing institutions and their work must be made; that alternative mechanisms for doing jobs should be considered; and that a philosophy of enlightened economic pragmatism be applied to revisions of public policy concerned with "city-building" in Canada.





## CAPITAL INVESTMENT AND ECONOMIC PROGRESS

H. SCOTT GORDON

SOCIAL PURPOSE FOR CANADA

EDITED BY MICHAEL OLIVER

UNIVERSITY OF TORONTO PRESS, 1961.

Reprinted by permission of

THE UNIVERSITY OF TORONTO PRESS,  
FRONT CAMPUS,  
UNIVERSITY OF TORONTO,  
TORONTO 8, ONTARIO

### Capital Investment

The most distinct mark of a modern "developed" economy is not only that it has machines to do the work of man but that it has machines to do work that man could never do at all. A thousand men might accomplish, in a day, the same results as one giant earth-moving tractor, but not even tens of thousands of men, without elaborate capital equipment, could generate and transport electric power or harness atomic energy or smelt bauxite into aluminum. An economy, if it is to be wealthy and progressive, must be "capitalistic" in the sense that it must possess and use large quantities of capital equipment.<sup>15</sup>

This capital comes in a great variety of forms and types. It includes schools in which knowledge is acquired, hospitals in which health is restored, homes where comfort and shelter are provided, factory buildings where workers and machines are housed, machinery which shapes raw materials into finished goods, trucks, roads and railways to transport them, warehouses to store them, and a host of others too many to specify. All these things however have one characteristic in common -- they provide a perpetual stream of services that either directly or indirectly can be devoted to the wants and needs of human beings. The capital of a society, viewed as a whole, creates value enough to maintain and replace itself and something over to add to the annual income of society. Capital is not merely an obedient and uncomplaining slave but one endowed with the potentiality of perpetual life.

### The Canadian Pattern of Capital Investment

In terms of degree of economic development the Canadian economy presents a rather ambiguous face. Canada can be regarded as an underdeveloped country judged in terms of its great potentialities for future growth. However, in terms of the capital stock it now possesses (which is a fairly good index of the degree of a country's development) it is already among the most highly developed nations of the world. In Table V, estimates of the total gross value of the capital stock of the Canadian economy are given. The first section gives the stock of "industrial capital" -- the plant, equipment, etc., used by industry which, broadly speaking, renders "indirect" services by assisting in the production of other commodities. The latter section records the nation's stock of housing, which renders its services directly to consumers, and the capital of governments and public institutions, which renders both direct and indirect services.

Measured in terms of 1949 prices, the stock of industrial capital in Canada amount to more than \$40 billion in 1955. Approximately three-fifths of this was in the form of buildings and other construction works (such as dams, land improvements, railway roadbeds, etc.) and the remaining two-fifths in machinery and equipment. Of these two categories of capital, the big growth in recent years has been in machinery and equipment. This has grown by about two and a half times since 1945, while the buildings and construction category has increased by less than a half. This difference reflects the fact that in the early days of Canadian economic development the big task was to build large construction projects, such as railways,<sup>16</sup> which were of fundamental economic importance. In more recent years we have been able to shift our efforts to equipping the economy with capital in the form of machinery and tools.

TABLE V  
Gross Capital Stock in Canada, 1955  
\$ million at 1949 prices

	Plant, buildings and construction works	Machinery and equipment	Total	
			\$	%*
<u>Industrial capital</u>				
Agriculture	1,237.2	3,316.0	4,553.2	5.8
Resource industries	5,082.6	2,176.6	7,259.2	9.3
Primary manufacturing	1,728.5	2,056.6	3,785.1	4.9
Secondary manufacturing	3,790.8	3,868.6	7,659.4	9.8
Transport, storage and communications	7,625.8	3,506.5	11,132.3	14.3
Trade, services and construction	4,362.2	2,385.8	6,748.0	8.7
Total industrial capital	23,827.1	17,310.1	41,137.2	52.8
<u>Social capital and housing</u>				
Government	9,608.2	1,334.2	10,942.4	14.0
Institutions	3,804.4	266.3	4,070.7	5.2
Housing	21,742.1		21,742.1	27.9
Total	58,981.8	18,910.6	77,892.4	100.0

Source: Hood and Scott, Output, Labour and Capital in the Canadian Economy, Tables 6B.2 and 6B.5.

\*Figures in this column do not add to 100 per cent due to rounding.

There is not enough space in this chapter to make an analysis of these recently provided estimates of Canada's capital stock. However, the data, which are given in considerable detail in the volume cited as source to Table V, reveal many important aspects of the development of the Canadian economy and merit careful study.<sup>17</sup>

The ability of a country to build up its capital is dependent on two main factors: (a) its willingness and ability to devote part of its current production to capital investment rather than to direct consumption, and (b) its ability to borrow from other countries by importing more goods and services than it exports. Since the end of the war, these two conditions have been well met in Canada. High national income, together with the high saving propensities of Canadian corporations and individuals have provided substantial domestic funds for capital investment and, in addition, foreign firms and individuals (mainly American) have invested heavily in Canada. Table VI shows the capital investments made in Canada from 1956 to 1959. In those years capital expenditures usually amounted to more than one-quarter of the gross national product and about one-fifth of this amount was financed by foreign borrowing.

TABLE VI

## Capital Investment in Canada, 1956-9\*

\$ million

	1956	1957	1958	1959+
Business capital	5,004	5,654	4,869	4,720
Housing	1,547	1,430	1,782	1,759
Institutional services	402	455	515	531
Government departments and waterworks	1,083	1,178	1,198	1,401
Total	8,036	8,717	8,364	8,411
Total as percentage of GNP	26.3	27.4	25.7	24.3

Source: Department of Trade and Commerce, Private and Public Investment in Canada, Outlook 1960, pp. 5, 7

\* These figures do not include expenditures for the repair and maintenance of the existing capital stock.

+ Preliminary

By almost any comparison, Canadian investment is large. Over the past several years in fact, the rate of capital investment in Canada as a proportion of GNP has been one of the highest in the world. The Canadian rate has been substantially above that of the United States, the United Kingdom, France, and Germany. The rate of investment in the USSR has only been a few percentage points above Canada's and this of course is in a country where capital development is the central aim of economic policy and is implemented by the full force of dictatorial power.<sup>18</sup>

These great capital investments in Canada have not, of course, been spread evenly over the economy. Some areas of the country have been developing much faster than others. Estimates of the geographic distribution of aggregate capital investment for the period from 1951 to 1958 are given in Table VII. It is clear from this Table that the principal development poles of the Canadian economy are located in central Canada, the west coast and the prairie petroleum region being secondary centres. It is impossible to predict the future pattern of investment with certainty but there does not seem to be any reason to expect that its high concentration in the central provinces will be altered in the near future.

#### The Significance of Investment

The decisions that are made with respect to capital investment are of vital importance to the economy and to the welfare of the Canadian people as a whole. The magnitude of the total investment made annually is the most important of the tangible factors that determine the rate of growth of the economy, and the industrial and geographic distribution of that investment will determine the shape and structure of the economy for years to come. Especially important are investments in basic industries such as transportation, natural resources, and certain primary manufacturing activities, for the capital creation decisions made there impress their influence very strongly on the investment and production plans of all other segments of the economy.

The great fallacy that pervades private enterprise thinking with respect to capital investment is the belief that investment decisions are regulated by the forces of the classical competitive market. However, many of the decisions that are made concerning capital development are so large and important that the influence they exert on the economy as a whole is far from "marginal." Moreover, they are subject to especially large degrees of uncertainty.<sup>19</sup> In addition, the number of business enterprises that are involved in these basic decisions are too few and too closely connected with one another for this activity to fit the economist's requirements of a competitive market.



TABLE VII

## Capital Investment in Canada, by Provinces, 1951-8

	\$ million	%
Newfoundland	678	1.3
Prince Edward Island	168	0.3
Nova Scotia	1,286	2.4
New Brunswick	1,126	2.1
Quebec	12,486	23.7
Ontario	19,346	36.7
Manitoba	2,465	4.7
Saskatchewan	3,014	5.7
Alberta	5,811	11.0
British Columbia*	6,317	12.0
CANADA	52,697	100.0

Source: Department of Trade and Commerce, Supplement to Private and Public Investment in Canada, Outlook, Regional Estimates, various issues.

\* Includes Yukon and Northwest Territories.

The choice then is not whether to regulate and plan capital investment or to leave it to the competitive market. The latter is no real alternative. The important questions are: who should do the planning, and according to what criteria? At the present time the planning of capital investment in Canada takes place in the head offices of a limited number of Canadian and American firms. Despite the close financial and commercial relations of these firms to each other the result is not a coherent programme of capital development but a confused jumble of (frequently incompatible) private plans and policies.

The conclusion is inescapable that the capital development of Canada must be placed under the control and direction of governmental agencies that are charged with the duty of implementing a definite and comprehensive plan respecting the long-run development of the Canadian economy as a whole. The heart of economic planning is investment planning, for it is this that will determine the future economic character of our society.

It is unfortunate that in recent years this fundamental issue has become obscured by the great amount of public discussion of foreign investment in Canada. Many people talk of foreign investment as if that were an evil in itself. In my view, that is an erroneous and misleading belief. It is true that American investment in Canada, being concentrated so heavily in direct investments in subsidiary firms and in the ownership of shares of Canadian corporations, carries with it more power of corporate control than the same amount of money invested in bonds or debentures. But the heart of the issue is not that Canadian industry is controlled by persons who are citizens of another country. Have we any reason to think that any substantive differences would result if the investment decisions were made in Toronto and Montreal rather than in New York and Chicago? The real issue is that these investment decisions, whether made by Americans or Canadian, are not sufficiently subject to the policies of a publicly responsible government. We should, in my view, stop our nattering about foreign control of the economy and consider instead the need for public as opposed to private control of these fundamental economic decisions.

Capital investment has another economic dimension, in addition to its implications for the future wealth and character of the economy. It is an important factor in the problem of short-term fluctuations in economic activity and, consequently, in the problem of unemployment.

The expenditure that is currently made for investment good determines the amount of employment there will be in the industries that produce these goods. A sharp reduction in investment creates unemployment in these industries and, indirectly, in other sectors of the economy as well. Our experience has been that capital investment expenditures are considerably more unstable than other categories of the gross national expenditure. The recession that began in mid-1957, for example, was largely caused by a decline in business investment. It is, of course, impossible for government to force businesses to invest but it has long since been accepted that the federal government must stand ready to compensate for these fluctuations by its own fiscal policies. Government expenditures on public works and other projects have been used in the past as a weapon against recession but these programmes have invariably been thrown together hurriedly and belatedly when the recession was already upon us. Until we accept the necessity of planning ahead for the achievement of enduring objectives, governmental capital expenditures will always have this haphazard and wasteful character.

### The Problem of Social Capital

In the bottom of Table V (already mentioned) is shown the capital investment made in Canada by the various levels of government and by public institutions such as universities, hospitals, and churches. This kind of capital is usually called "social capital" in order to distinguish it from the "industrial capital" that results from the investment expenditures of business enterprise.

Social capital includes a wide variety of things -- school buildings, water and sewerage facilities, parks, roads and bridges, hospitals, churches, museums and concert halls, and so on. There are few, if any, characteristics that all of these things share so it is difficult to say exactly what makes a thing a part of social rather than industrial capital. However, we may say that, broadly speaking, social capital is constructed in order to meet certain needs that large numbers of the general public have in common; it usually serves these needs directly; and it is not usually operated on the profit criterion.

The importance of social capital in our society has been increasing markedly in the last generation or so. Some of this growth has been caused by the development of new products -- the automobile, for example, has made necessary the construction of roads and streets; and some by the desire for higher standards of culture and welfare -- thus schools, hospitals, civic centres, etc. When one considers social needs as a whole however it is remarkable how much is attributable, directly and indirectly, to the increased urbanization of our society. The concentration of hundreds of thousands and even millions of people in cities and metropolitan areas brings great need for water supplies, sewage disposal facilities, recreational facilities, government and civic services of a variety of kinds, etc. Even the recent development of national and provincial parks where people may go to camp and tour is largely due to the increased value that an urban society has begun to place on the enjoyment of nature.

The degree of urbanization in Canada has been increasing steadily over the last thirty years. Even in the provinces that are already the most heavily urbanized (Ontario, Quebec, and British Columbia, where some two-thirds of the population now live in urban areas) the trend to the cities still continues.<sup>20</sup> Our needs for social capital in the future will consequently be even greater than they have been in the past.

Thus far, our record for the creation of social capital has not been a good one. Between 1945 and 1955, the gross stock of social capital increased by less than 40 per cent.<sup>21</sup> The stock of industrial capital by comparison, increased by 70 per cent in the same period.<sup>22</sup> Compared to that of previous periods, the rise in our social capital since the war has been rapid but it is still far too low in terms of our needs. Large backlogs exist in practically every area of social investment and a substantially increased rate of construction will be required in the future if these are to be filled.

One of the chief reasons for the inadequacy of our social capital is that a large part of it is the responsibility of municipal governments which seem to lack both the financial means and the inclination to make sufficient expenditures of this nature. In terms of the importance of cities in our way of life the funds available to municipal authorities are ridiculously small. In my own city, where thousands of homes depend on wells and septic tanks for water and sewage disposal, where there is no civic auditorium or theatre, where the streets and sidewalks are broken and filthy, I pay annually in municipal taxes an amount only as large as I pay to heat my home, or, to take another comparison, an amount substantially less than the depreciation on my automobile. For this pittance I presumably am to expect the civic authorities to provide streets and sidewalks, water and sewage disposal, schools, police and fire protection, and a host of other services. Is it any wonder that many of them are provided in a fashion that is shabby to a degree?

A thoroughgoing reform of the foundations of municipal finance is essential if we are to meet the problem of providing the kind of social capital that a modern society requires. There is no area of modern life in which it is more necessary for us to elevate our vision to a new plane and to display some imagination and foresight.

#### FOOTNOTES

- <sup>15</sup> Numerous studies have found that in most advanced economies, the ratio of capital to output is between two and three; that is, it takes a stock of two of three dollars' worth of capital to enable a continuous flow of final goods of one dollar's worth a year to be produced.
- <sup>16</sup> The haphazard nature of the economic development of the time is reflected in the fact that this task, hard as it was, we made even harder for ourselves by excessive building of railways.
- <sup>17</sup> An example: the investment of Canadian agriculture in machinery and equipment is almost as large as that of the secondary manufacturing industry, and has been more rapid since the end of the war than that of almost any other industrial sector. Canadian agriculture is becoming a highly mechanized industry.
- <sup>18</sup> See the Chase Manhattan Bank, *Business in Brief* (March-April, 1960) where some interesting international comparisons of investment and growth rates are made for the period 1950-7 using data from the United Nations and the Pan-American Union.
- <sup>19</sup> The following statement by an economist who is a strong defender of the competitive order is of interest: "It is unfortunate that the theoretical argument defending the price system as an efficient regulatory mechanism becomes least satisfying when it treats of the regulation of investment decisions. Investment decisions characteristically involve large, indivisible blocks of real assets and always they require the assessment of distant and uncertain prospects. Indivisibilities and uncertainty comprise two of the principle conditions over which the theoretical justification of the price system falters". Wm. C. Hood, *Financing of Economic Activity in Canada* (Ottawa, 1958), p. 271.
- <sup>20</sup> See Y. Dube, J. E. Howes, and D. L. McQueen, *Housing and Social Capital* (Ottawa, 1957), p. 24.
- <sup>21</sup> Hood and Scott, *Output, Labour and Capital*, Table 6B.5. Total figures given here include housing which is eliminated in arriving at the percentage given in the text above.
- <sup>22</sup> *Ibid.*, Table 6B.2.



## REQUIREMENTS FOR THE DEVELOPMENT OF RENEWABLE RESOURCES IN THE FRONTIER REGIONS OF CANADA

PETER M. STERN

TRANSACTIONS OF THE RESOURCES FOR TOMORROW CONFERENCE  
VOLUME 3, 1962

Reprinted by permission of

ROGER DUHAMEL,  
QUEEN'S PRINTER,  
OTTAWA, CANADA.

This paper has been prepared to stimulate a discussion of resource development problems in the forested regions of northern Canada.<sup>1</sup> Specifically, we intend to deal with the means required to bring about such development with maximum return to the areas thereby opened up and to the country as a whole.

To begin with, we accept the premises laid down for this Workshop: that the development of frontier regions receives its initial impetus from resource-based activities, and that the cost of providing access to and essential community services for these remote and isolated operations is necessarily out of proportion with the social overhead costs of attracting industry to the settled parts of the country. From these premises it follows that government should give priority to the stimulation of those resource-based industries which hold the best prospect of stability and which provide the "take-off" for related economic activities. The forest products industry meets these criteria of development better than most other capital-intensive ventures.

Although none of the Conference Background Papers refers specifically to the need for "northern" industrial resource development programs, several of the authors express deep concern over the future of forestry and forest-based industry as a pillar of the national economy. They suggest that the country may be about to price itself out of the international market for forest products because of its high cost economy and a continuing neglect of the kind of forest management needed to ensure a supply of high-quality timber competitive at the mill with the raw material of countries hitherto dependent on Canadian exports.

If the forest areas supplying existing mills are in danger of losing some of their markets, is there any reason to believe that new investment can be attracted to the more remote forests of the frontier regions? We believe there is, and that careful study of the production-distribution complex in selected forest areas can establish the economic feasibility of new forest products industries. We further believe that such assessments are a proper function of governments responsible for the administration of underdeveloped frontier regions. The reason for making this claim is that we have had the good fortune, in recent months, to assist the government of Manitoba in the conduct of several investment-opportunity studies in which the northern forests have played a prominent role. This work has enabled us to draw certain conclusions which we should like to offer for general discussion. Firstly, we touch upon the outlook for forest products industry along the northern frontier; then we deal with government actions to stimulate such development, drawing heavily upon our Manitoba experience.



## The outlook for attracting new investment

1. Relatively low wood cost and assurance of a long-term, non-competitive wood supply for a mill large enough to benefit from economies of scale constitute the north's principal drawing card. Large accessible areas with sufficient uncommitted wood are getting scarcer, so that the frontier regions will become desirable as soon as an economic production-marketing "package" can be established. The ingredients of such a package are (a) a favorable resource environment (quality of stands, topography, ease of shipment to mill), (b) a government incentive program which attracts the investor without damage to the public interest, and (c) transportation costs low enough to bring the identified market within the reach of the new mill.
2. A detectable industry trend to locate small paper mills in major market areas and to supply them with pulp from a single large mill in a low-cost wood area offers new opportunities for northern development. Because wood may account for as much as 50 to 75 per cent of the total cost of manufacturing pulp, non-integrated pulp mills are still being built in Canada (though not in the United States) near the source of supply. The difference in wood costs can make it more economical to dry and bale the pulp, ship it to the market and redisperse it there than to use wood from areas adjacent to the market-oriented paper mill.
3. A new entrant into the industry will find it easier to break into the North American paper markets by way of a pulp mill located near abundant timber resources than to attempt production of converted or finished paper products at the outset. The non-integrated pulp mill has been the traditional route of entry into the industry, and Canada's northern forests can offer the new investor a wedge into the lucrative United States market.

So much for general trends pointing to the potential development of the hitherto untapped forest areas. Specific investment opportunities cannot be identified, however, until all the elements that make a proposed northern operation competitive are thoroughly analyzed. We therefore advance the thesis that the senior governments, as guardians of resource-endowed Crown lands, should play an active role in translating a vague awareness of resource development potentials into an opportunity for the investment community. This kind of initiative requires them to assume responsibilities which transcend the customary resource mapping or inventorying function.

It is understood, of course, that under a system of free enterprise the government's role in economic development should be limited to creating and maintaining an economic climate favorable to growth, and to influencing and guiding the direction of private investment. Yet how can any government adequately protect the public interest without acquiring the information needed to evaluate the likely costs and benefits of a particular resource development project? Clearly, the government must gather much of the information upon which the entrepreneur will ultimately base his investment decision. Why then not share it with him to the extent that disclosure is possible, and why not prepare a case for his consideration which reflects the government's interest in seeing the project undertaken?

By spelling out the development incentives on the basis of which it is ready to negotiate the government can show its responsiveness to the investor's perpetual search for profitable ventures. In the forest products industry, in particular, the number of opportunities for profit-making investment is large and geographically widespread, and any operator who is initially attracted to a frontier area can be expected to view it as only one of several possible choices for putting his capital to work.

## Indicated government actions

Of paramount importance, to judge by the experience of Manitoba, is the creation of an internal mechanism capable of focusing the views and the capabilities of various government departments and agencies upon a resource-develop-

ment situation. In Manitoba, this function is exercised by the Manitoba Development Authority, in which the resource departments and agencies are represented. Within the framework of such an organization it becomes possible to formulate strategies for resource development and to ensure that the government speaks as a single voice in negotiations with potential investors. In resource-use situations such as the proposed development of Crown land forests, where the government holds the key to private decision making (control over allocation of forest reservations; setting of stumpage fees, ground rents, and power rates; road building and townsite selection, etc.), flexibility in the conduct of negotiations is in the public interest. To achieve such flexibility, each department concerned must acquiesce in the broad goals of the negotiations and assist in setting the limits beyond which incentive measures to industry cannot be granted.

To the prospective investor, the existence of an organization like the Manitoba Development Authority is an indication that the government "means business" and that his requests for information can be funneled through a single point of contact. Furthermore, by maintaining clear-cut lines of responsibility, the government can ensure the confidential conduct of the negotiations.

The thoroughness with which a government may wish to prepare its "case" for resource development is illustrated, once again, by an example from Manitoba. Resource appraisals are necessarily incomplete until the economic potential of the resource can be ascertained. Similarly, without a clear definition of their market potential, the forests of the north are only a latent resource and cannot be counted upon to add to the nation's wealth.

Accordingly, to establish the feasibility of a forest products industry along the northern frontier, the government of Manitoba last year commissioned a market survey of the territory deemed to be within reach of a northern pulp and/or paper mill. Since the geographical area which such a mill can serve is determined largely by outbound freight costs vis-a-vis the transport charges from competitive producing areas, it is not surprising to find that a plant in northern Manitoba cannot compete effectively outside of the Prairie Provinces and the midwestern United States. After testing the potential market for a variety of product lines, it was concluded that the growing demand for woodpulp and newsprint warrants the construction of new capacity to serve these regional markets. The usefulness of such information to government and investor alike is almost self-evident.

The market study illustrates the limitations which transport considerations place upon northern development. Assuming that production costs are comparable with those of existing mills, the competitive position and ultimate profitability of a proposed frontier-area manufacturing facility will be determined in large part by freight costs, since the manufacturer generally absorbs all of the freight costs and offers his product at landed-contract prices. In the case of a pulp mill serving the Chicago area from northern Manitoba, for example, total direct freight costs represent about one-fourth of annual sales, with outbound transportation charges on finished product accounting for more than half of these costs.

At the present time there is no economic alternative to the shipment of forest products by rail from northern Manitoba. Unfortunately, however, the inequities of Canada's railway freight structure are posing perhaps the most serious obstacle to the development of northern resources. In the words of the MacPherson Royal Commission on Transportation:

These inequities are principally a result of the fact that the railways' competitive position relative to other carriers has declined and, as a consequence, they have been forced to obtain a greater relative share of the revenues they require from the traffic which is least affected by competition. And, since the position of the railways vis-a-vis their competitors seems to continue to decline with each passing year, the degree of inequity experienced by the traffic still tied to the rails continues to grow with

each general increase in freight rates which the railways are permitted to apply.<sup>2</sup>

Remedies for overcoming these disadvantages can only be devised at the national level; presumably they will be incorporated in the transportation policy under formulation by the Royal Commission. In the meantime, however, the cost disadvantages which remoteness and the lack of competitive means of transport impose upon the northern frontier areas must be alleviated to some extent by the incentives a province is able to offer prospective investors.

A detailed discussion of these incentives and of their "cost" to the public is beyond the scope of this paper, but some remarks concerning a government's negotiating position may be in order. In general, we advocate a program whereby the government would receive somewhat smaller revenues and grant somewhat larger timber reserves than would be appropriate in less remote forest areas in recognition of the special problems of northern development. This recommendation does not envisage either the payment of a subsidy or the granting of terms which would seriously limit the development of a region's natural resources by other parties. The objective is, of course, to secure development and revenues that might not otherwise be forthcoming.

It is necessary to point out to those who may criticize a government for adopting a so-called "giveaway" policy that opportunities not taken up in the near future may be permanently lost. Developments such as those listed below could make frontier area forests much less competitive in world markets than they are today:

1. Newsprint and other pulps made from alternative raw materials now constitute 4 to 5 per cent of world supply; this trend is continuing.
2. Technological improvements are leading to the use of species which were formerly bypassed. For example, 25 years ago a high-grade pulp could not be made from southern pine; today, southern newsprint is considered to be of standard grade. In addition, hardwood species have become a raw material for pulp mills as a result of recent process innovations.
3. Many of the emerging nations are striving for self-sufficiency in pulp and paper production based on the utilization of domestic raw materials.

The shadow cast by these and related developments constitutes a powerful argument in favor of early incentive program negotiations, because once the heavy investment in plant and equipment has been made, a forest products industry will continue to operate in the frontier area even though new investment opportunities may beckon elsewhere.

The point to bear in mind is that any program designed to encourage resource development must stand or fall as a "package." To compute its cost in terms of loss of potential revenue to the government is an idle exercise since there is little likelihood at present that two or more forest products firms would compete for the same development area. In the final analysis, then the effectiveness of an incentive program will be judged by the kind and the rate of economic growth which it has made possible in a northern frontier area.

Use of timber resources. The cost and availability of a wood supply is the primary locational factor in the forest products industry. Hence, any agreement between government and investor depends on the designation of a specified cutting area and the determination of acceptable stumpage rates. For the operator, the stumpage rate may account for only 1 per cent of estimated production costs; thus, the effectiveness of this incentive should not be overrated by government negotiators. For the government, revenues



from stumpage fees constitute the largest direct benefit of a northern timber operation. In most instances, these revenues are applied against the cost of fire protection which the government must bear whether or not the forests of the frontier areas are put to productive use.

By continuing to bear this cost, the government is in a position to offer the investor an additional incentive which, to him, represents the saving of a somewhat indeterminate out-of-pocket expense. To the government, the incremental cost of providing fire protection is not severe since much of the capital cost would have to be incurred regardless of the pulp mill's existence.

In setting stumpage rates, the government should also strive to cover the cost of such activities as forest management, research, administration and--if possible--the retraining of the local native population.

Power costs. These are a significant cost item to the investor. An increase of one mill adds about \$1 to the cost of each ton of pulp produced. In areas where power rates are under direct government control, they can be included in the incentive program. As in the case of stumpage fees, the rate should be set at a level that will cover the costs which the government wishes to assign to the projected operation--at least the direct cost of supplying the power to the mill and some portion of depreciation and debt service. This will vary according to whether a power plant has been built for the specific purpose of opening up a frontier area and whether alternative uses for the power exist at the time of negotiation.

Product diversification. The establishment of a pulp mill would facilitate the growth of secondary forest-using industries by providing raw materials--both logs and waste--at a lower cost. The government should therefore negotiate a timetable for diversification which would give the operator an adequate period to launch his primary enterprise, while ensuring the eventual development of secondary operations aimed at a more efficient use of the forest resource and the creation of additional employment and revenues under the incentive program.

Townsite development. Where a new townsite is required to support a forest products industry, the government should be responsible for planning it. Although resource development companies are experienced in townsite development, they are not in the business of building municipal facilities and may not possess the skills to ensure the construction of a well-conceived permanent community. Furthermore, these companies appreciate the opportunity to concentrate their efforts on the main problem of getting a mill underway. The formula for sharing the cost of these planning services should form part of the negotiating "package."

Financial incentives. Financial incentives offered in the field of townsite development constitute an important attraction to resource developers. For all but the largest enterprise, the cost of such development is a significant percentage of total investment requirements which would have to be charged against future production costs. Thus, for every million dollars invested in municipal services for improvements, about 66 cents would be added to the cost of one ton of pulp. With the total capital needs in a modern frontier town estimated at \$5 million or more, the competitive position of a northern pulp mill would probably be seriously impaired if financing had to be provided by the investor.

As a minimum, therefore, we suggest that government be prepared to guarantee the repayment of funds used for community development. In this way, the investor is assured a premium interest rate since the pledge of government credit stands behind the repayment of bonds sold for this purpose. As a maximum incentive, the government may wish to make outright grants, possibly in the form of land grants for all urban uses, excepting the mill area. The community can then in turn sell the land to developers, individuals, and to the company itself if it wishes to engage in other operations. Land before development occurs is cheap; it increases in value as the community grows. By granting such land



to the municipality, a source of funds is provided which costs the senior government very little. This method of financing has been used in several resource development areas, and substantial revenues have accrued to the new communities from arrangements of this type.

The principal reason for granting such financial incentives is that the negotiations involve the development of a renewable resource. The community which grows up around such a resource can expect much greater permanence than the community arising from the development of a non-renewable resource. It holds out a much better prospect of being a focus for the long-term settlement of a frontier area.

#### Conclusion

We hope that this brief review of some of the more important elements of an incentive program will stimulate a broader discussion of resource development alternatives facing the senior governments across the country.

Our contribution to this discussion may be summarized as follows: The northern frontier areas present special development problems which require special solutions. Their forest resources are extensive and potentially so valuable that ways must be found to transform them into economic resources, i.e. a development opportunity susceptible of attracting private capital. Neither government nor industry can expect to obtain a windfall profit from a frontier area operation. However, most entrepreneurs will carefully weigh the disadvantages of distance from markets and the difficulties of the environment against the assurance of a long-term supply of quality timber and the prospect of a more favorable cost structure than obtainable in the areas of permanent settlement. For government, the benefits to be reaped from an early development of what is now a wasting asset offer adequate justification for the negotiation of a realistic incentive program.

## **PART SIX**

### **IS REGIONAL GOVERNMENT NECESSARY?**



## THE CONCEPT OF A PLANNING REGION

JOHN R. P. FRIEDMAN

LAND ECONOMICS, VOL. XXXII, No. 1, Feb. 1956

Reprinted by permission of

UNIVERSITY OF WISCONSIN,  
121 SOUTH PINCKNEY STREET,  
MADISON 6, WISCONSIN.

### I

With few exceptions, public planning activities are delimited and organized in space. The region, the county, the metropolitan area, and the city are usually considered to be the basic units for planning.

In the present essay we shall be primarily concerned with the functional relation between the two main forms of areal planning, between city and regional planning. Theoretically, there should be little to distinguish one from the other. In both cases the major problem is the same: how to bring the physical environment in which men live under the controlling influence of the public interest. In practice, however, city and regional planning in the United States have proceeded along diverging paths.

To explain this lack of unity we would have to go far into the historical origins of planning in this country--a task too ambitious for the present essay.<sup>1</sup> But the basic distinction between city and regional planning appears when we consider it as primarily a difference in controls available to local and federal government for guarding the public interest.

In the cities, planning has evolved largely as an effort to maintain existing rental values and to improve the circulation of people and the flow of goods.<sup>2</sup> Zoning, subdivision control, and the powers of eminent domain are among its principal and most effective tools. Occasionally, too, city planners are charged with the preparation of capital improvement budgets, and the planning function has been extended to problems of internal growth and development. In most cities, however, the predominant concern is still with the present. Only peripheral attention seems to be given to a comprehensive approach which would determine the "needs" of the community ten, twenty, or even fifty years ahead and would proceed to show how these "needs" might best be met in the present. Rarely is the community offered a choice to consider what kind of a future it would have. The element of design in planning is almost totally lacking, and the evolution of life in the community is left by default to the haphazard interaction of private interests.



Regional planning, on the other hand, has grown up under quite different circumstances.<sup>3</sup> "Regional planning," wrote the National Resources Committee in 1935, "should, in the main, confine itself to dealing with the physical resources and equipment out of which socio-economic progress arises."<sup>4</sup> By this definition, regional planning has two main foci of interest: physical resources and their development. But the control powers of the federal government were so restricted that its point of entry into regional planning was the field of water resources where it had primary jurisdiction. Through the development of water resources for a multiplicity of uses it was hoped that social and economic advance in the watershed would be furthered.<sup>5</sup> The watershed, therefore, became rapidly identified as the "proper" region for planning, and the recognition that land resources are intimately re-related to the use of water only strengthened this view. Whether it was called the Tennessee Valley, the Columbia Basin, the Missouri Valley, the Central Valley, or the Arkansas-Red River Valleys, the physical setting was always a major drainage basin organized for comprehensive resource development. Flood control; the development of facilities for navigation, electric power, irrigation, and recreation; stream sanitation; erosion control and reforestation; even mineral development came to be included under development schemes in major river basins.<sup>6</sup>

The best known and certainly the most advanced regional planning agency in the United States is the Tennessee Valley Authority. Elsewhere in the United States a more complex scheme for regional planning has been worked out which involves a multiplicity of federal agencies such as the Bureau of Reclamation, the Corps of Engineers, the Soil Conservation Service, and the Forest Service; and, to an increasing extent, state and local organizations. In every instance, however, administration is found to be organized along regional (watershed) lines.

The contrast between city and regional planning which we have attempted to sketch may be summarized by saying that city planning has been primarily concerned with community conservation through land use planning and control while the purpose of planning for regions has been economic progress through the development of natural resources. What Catherine Bauer calls an "iron curtain" has descended between city and resources planners.<sup>7</sup> Two different professions, two different vocabularies have grown up. Communication between them has become exceedingly difficult, and on the level of practical action there appears to be little coordination between schemes of regional and urban development.

Now, coordination is no absolute value. It becomes valuable only where it furthers a particular objective. Thus, we may well ask whether regional planning as currently organized can achieve the end of sustained economic progress without taking explicitly into account the existence of urban centers and whether city planning in its present form can effectively achieve its purposes while ignoring the larger regional framework within which the city has to function. These questions have not as yet received adequate attention.

## II

The concept of the region as a tool for planning had its origin in the Great Depression. There had been forerunners, of course, such as the Regional Planning Number of the Survey Graphic in 1925,<sup>8</sup> and the writings of Benton MacKaye,<sup>9</sup> but, as late as 1934, Hedwig Hintze could write in the Encyclopedia of the Social Sciences that "in the United States regionalism has never really appeared."<sup>10</sup> To be sure, there existed many examples of metropolitan planning in New York, Boston, Washington, Chicago, Los Angeles and several of the other large American cities but, as we shall see, the "new regionalism" explicitly rejected the metropolitan area as a logical unit for planning.

The new philosophy took hold especially in the South where planning came to be looked upon as the truly dynamic aspect of regionalism.<sup>11</sup> It was an essential particle of the regionalist's fate that planning would provide the means toward the "rehabilitation of the people, toward the reconstruction of regional economy, toward increasing the region's revenue to the nation as well as its own wealth, and toward general regional, cultural adjustment."<sup>12</sup> The South saw in regional planning an opportunity to halt the decline of its resources and its people and to achieve what came to be vaguely referred to as "regional balance," while yet maintaining its unique agrarian culture and tradition. Whether there was not, indeed, a conflict among these objectives is a question that was not apparently considered.

The writers primarily responsible for elaborating on this concept of the planning region were teaching at Southern universities.<sup>13</sup> And the South, in their view, was indeed the archetype of a "true" region. It was identified with a distinctive "folk culture," the region being "an expression of the folk who occupy it and who give it a distinctive character through their 'natural' extra-organized, extra-technological, and unrationalized ways of life."<sup>14</sup> Folk culture, no doubt, was the cohesive bond that held a region together. But it was not sufficient for a definition. The region was also a distinctive area because it possessed "the largest possible degree of homogeneity measured by the largest possible number of economic, cultural, administrative, and functional indices, for the largest possible number of objectives."<sup>15</sup> Clearly, only a rural economy could, by any stretch of the imagination, be considered sufficiently "homogeneous" to qualify as a region. Though urbanization had made progress in the South, it had not yet drawn the focus of regional interest upon itself.<sup>16</sup>

An imagery of rural values still prevailed in the 1930's.<sup>17</sup> Perhaps the most amazing document of the times is a collection of essays written by twelve Southern writers in which the issue was unambiguously posed: agrarian versus industrial society.<sup>18</sup> These essays turned into a vigorous defense of the "Southern way of life," of traditionalism against what the authors called the "American or prevailing way," against progressivism. Industry must never come to the South in large numbers; the South was to remain a separate cultural enclave, a sanctuary of leisurely culture in the "European" sense.<sup>19</sup> And when a few years later TVA set about to develop the great hydro-electric potential of the Tennessee River, even *Fortune* magazine in an otherwise sympathetic article expressed grave doubts that all of the energy produced by federal dams could ever be sold to industrial consumers.<sup>20</sup>

Economic betterment in the South could be accomplished only by over-all planning--that, at least, was the current belief. *Laissez-faire* as a solution to the difficulties confronting the South was rejected as "futile and cruel."<sup>21</sup> The New Deal provided the impetus for planning. And the homogeneous, natural region seemed to be ideally suited to the comprehensive planning approach. No one, it might be added, seemed to be especially surprised by this strange wedding between Southern rural conservatism (region) and Northern progressivism (planning).<sup>22</sup>

The National Resources Committee which sponsored an extensive study of the region for planning tried to avoid some of the pitfalls of the ideological approach taken by its Southern proponents. "Regional planning," the Committee stated, "is not an end in itself; rather it is an instrument for arranging certain things more successfully. It is a basis for action. It is a means for deriving sensible policies and programs, and it should be an aid in determining what kinds of devices are most suited to carrying out these policies and programs."<sup>23</sup> But the ideology was in the air; it was pervasive, and it entered as an unconscious bias into the thinking of the Committee when it rejected the concept of the region based upon metropolitan influence:

"To construct regions which would adhere to cities rather than to the broader aspects of resources, economic patterns and regional interests is to place the emphasis upon one factor rather than the total region. Upon such a basis, regional planning tends to become an expanded form of city planning. On the other hand, it is by no means certain that planning has not arisen at least in part out of necessity of preserving local rural culture and resources against chaotic economic and social forces emanating from the city. Even were cities themselves carefully planned, this would still be true, for the city is an organism whose very nature places its nutritive processes above larger regional considerations."<sup>24</sup>

This was in 1935. In 1938, Lewis Mumford published his brilliant study on *The Culture of Cities*.<sup>25</sup> While generally sympathetic to the Southern exponents of regional planning, he could not--and would not--escape the basic fact that it was the city which gave a region its cultural vitality. Like his Southern brothers-in-arms, he thought he recognized the region as a "natural area." But, he added, "to define human areas, one must seek, not the periphery alone but the center."<sup>26</sup> The city was thus a fact of the utmost geographic importance "for the urban center tends to focus the flow of energies, men, and goods that passes through a region, concentrating them, dispersing them, diverting them, rerouting them, in short, exerting a close and controlling influence over the development of region as a dynamic reality."<sup>27</sup> The city was viewed as analogous to the heart of the body: a controlling mechanism which pumps the life blood of energy, people, and commerce to all parts of the regional organism.

Shortly after the appearance of Mumford's book came the war, and with it began the sudden and startling rejuvenation of the American economy. Already by 1942 there were signs that the wind had shifted: the city was beginning to make an impression on the consciousness of the nation. In a challenging article, Louis Wirth proposed the metropolitan region as a planning unit.<sup>28</sup> That a restatement of the principles of metropolitan planning was necessary at this time only emphasizes the pervasive influence which the Southern School of regionalists had had on the spatial organization of planning. Wirth proposed that the immediate area constituting the region should be the area of daily intimate and vital interrelation between the city, its suburbs, and periphery and, further, that the region should be a unit "which takes account of the city's and its surrounding area's place in the national and world economy."<sup>29</sup>

Toward the end of the war there appeared a sharply critical article which attacked what it recognized as the rural traditionalist bias of regionalism on the grounds that it had failed to do justice to the facts of the technological revolution that was remaking America. "Regionalism," wrote Kollmorgen, "runs counter to the technological aspects of society which are universal and dominant and will eventually prevail over discordant folkways which regionalists may try to perpetuate."<sup>30</sup> Urbanism, to Kollmorgen, was the "wave of the future" that would sweep everything before its onrushing advance.

But the rural values propounded by the regionalists derived from a hardy stock and would not die so easily. Two years after Kollmorgen's incisive critique, and already well into the postwar era, a group of Yale University social scientists and planners resurrected the imagery of a natural region with its foundation in folk culture.<sup>31</sup> This time, however, the regionalists went beyond the traditional requirements of "geographic unities" and "homogeneous desires, attitudes, and wants," and suggested a forceful analogy of the region with individual living organisms.<sup>32</sup> Living in one of the most urbanized, industrial "regions" in the United States, the authors of the Yale Report searched for a regional



philosophy that would somehow conform to their urban experience. In "biologism" they found an adequate basis for their beliefs by which they could challenge the mechanistic aspects of an urban society which they at once accepted and opposed. In this, they came very close to Lewis Mumford's own interpretation a decade earlier.

The Yale Report was perhaps the last outburst of the regional planning ideology in this country. But it did not mean the end of regional research as such. Since 1947 a number of regional studies have been published which continue the long line of such studies first begun by the National Resources Planning Board in the 1930's. The Economy of the South, sponsored by the United States Council of Economic Advisers, was one of these and a typical example of the difficulties that the older regionalists encountered.<sup>33</sup> The study included 13 Southern states, chosen on the basis of a "certain homogeneity in geography, population, climate, income, and history," but especially because each of these states was felt to be vitally concerned "in the production of one or both of the two great cash crops which dominate the agriculture of the region, cotton and tobacco."<sup>34</sup> But no sooner had they stated it, than the authors of the Report retracted this inclusive definition. "In fact," they continue, "the problem of homogeneity arises almost as soon as more than one State is included if, indeed, it does not arise within the borders of a single State."<sup>35</sup> From a rigorous, scientific viewpoint a definition of the region according to homogeneous factors seemed rather a shaky one in 1949.

A second important regional study dealt with the New England economy.<sup>36</sup> But here the problem of definition appeared in even a more striking form. While purporting to deal with the whole of the "region," the report is actually pre-occupied with southern New England, to the relative neglect of rural Maine, Vermont, and northern New Hampshire. Although in their statistics the authors were compelled to admit the basic north-south distinction inherent in the human geography of the region, they described New England elsewhere as an "old industrial community," But surely this is no more than half of the story. The "region" turns out, in fact, to be two, divided among an even greater number of metropolitan spheres of influence.

The very ambiguity of both these reports regarding the nature of their "regions" suggests that the old conceptions had become of doubtful value. A new regional order and a new kind of planning appeared in the making, an order based on "interdependence" instead of a spurious homogeneity. And again it was Louis Wirth who spoke out for the new concept.<sup>37</sup> In such a region, he wrote, "the component parts are not necessarily similar or identical but stand in a relationship of significant interdependence or integration of life in one or more respects. Such a region finds difficulty in delineating its boundaries, but is more likely to have a salient or dominant center....."<sup>38</sup> His article helped to clear the way to a view of regional planning that would be in greater accordance with the facts of economic development. To an elaboration of this view we shall now proceed.

### III

It was primarily through the efforts of the Chicago school of sociologists during the 1930's--building on the pathbreaking work of McKenzie --that the concept of the metropolitan region as the logical unit for planning was developed and refined.<sup>39</sup> Concurrently with these studies at Chicago, the German geographer, Walter Christaller, suggested that any inhabited area would exhibit a certain structure of settlement which may be read as a hierarchy of central places standing in a mutually dependent relationship to each other.<sup>40</sup> The validity of Christaller's rigid geometrical pattern of central places has been variously questioned.<sup>41</sup> Its main influence, however, was to provide a new perspective on regionalism and regional structure. To the attentive reader it suggested an approach which by-passed the old problem of delineating homogeneous "folk-regions."



The first major advance beyond these pre-war researches was achieved in this country by Donald Bogue, who provided large-scale empirical evidence for the theory of metropolitan dominance advanced by McKenzie and offered aggregate measurements of metropolitan regional structure.<sup>42</sup> The next step in the development of metropolitan theory soon followed with an attempt to bring together the theories of regional structure as a system of central places (Christaller) and of metropolitan structure (Bogue). Rutledge Vining of the University of Virginia, in a highly stimulating paper, proposed to view the human landscape as an "inter-connected system of central places."<sup>43</sup> Vining appeared to be strongly influenced in his theory by certain traffic flow maps he had seen for the United States. Indeed, his maps seemed clearly to indicate an hierarchical pattern of cities that transcended any "regional" boundaries and presented instead a picture of economic "flows" of different densities, joining one city to another.

This novel view of the "region", in effect, dispensed with the traditional regional concept altogether. Rather, it pictured a system of cities having certain properties of stability, though individual units within the system might always be shifting.<sup>44</sup> Considerable support for this view can be found in the long-run trends of the American economy.

An ever-increasing proportion of the total population lives today in cities or on the periphery of cities. According to Bogue, 57 percent of the population in 1950 lived in the 162 metropolitan areas defined by the Census, and the proportion continues to rise with each year.<sup>45</sup> Shift of population from rural to urban-metropolitan areas implicit in these figures is excellently portrayed in the accompanying map: population appears to move into clusters around relatively small number of central places, and most of the rural countryside is becoming rapidly depopulated. Much of this growth during the past two decades occurred within the "rings" of metropolitan areas, however, rather than in central cities.<sup>46</sup> A rough picture of this important trend may be got by comparing the growth rates of urban and rural non-farm populations during recent decades. Between 1930 and 1950 urban population in the United States increased by 30 percent, contrasted with a 64 percent gain in the rural non-farm sector.<sup>47</sup> Most of this gain was in the suburbs.

With a high concentration of population in cities and in the areas peripheral to them, central places also gained relatively in economic power. Transport and communications systems came increasingly to focus on the dominant cities. The traffic flow map reveals the striking instance of "nodality" in the flow of the economy.

Population growth centering around cities must be viewed in the context of the upheaving changes in the American economy which have led to a progressive reduction of employment in farming and to a corresponding increase of opportunities in manufacturing and other sources of employment. The full development of a system of cities is related to economic changes and the particular pattern to which it conforms is dependent on the stage of economic maturity which the economy has reached. With rapid industrialization, new non-farm jobs tend to become available at a faster rate in the larger cities of an area than elsewhere.<sup>48</sup> And income changes, on the whole, parallel this movement of jobs to the large cities.<sup>49</sup> Economic development seems, indeed, to act in such a way as to enhance the possibilities of further growth at central places.<sup>50</sup> Not only does industrialization tend to improve the accessibility of an area by encouraging the provision of a wider variety of transportation services in the center, but it creates its own markets, tends to tip the balance of available capital for investment in favor of the city, and contribute to the progressive specialization of the labor force.<sup>51</sup> And once a pattern of urban settlement is established, its basic structure tends to perpetuate itself.

As the larger cities become more heterogeneous, the smaller cities and communities within their sphere of influence become functionally more specialized. Some grow into "satellites" of the center, others into specialized service, industrial or market cities. While the center of economic power in this pattern is the metropolis, all the communities within its economic reach are mutually dependent upon one another and upon the metropolitan center in its turn.<sup>52</sup>

The emerging pattern of the economy--what Lampard calls its metropolitan phase<sup>53</sup>--is thus built up increasingly around the city region with its dense urban core, its less densely populated outer "ring" (population declining outward toward the periphery of this "ring" along the major routes of access), and its satellite communities.<sup>54</sup> With increasing industrialization the conditions for further rapid growth in city regions tend to improve, and the "links" between and among city regions--in terms of population flows and the flows of goods and communications--tend to be strengthened. There is increasing interdependency throughout, and the structure of the whole economy tends to become more precisely defined along functional lines..

If this description of the spatial structure of a developing economy is substantially correct, we conclude that the city region has, in fact, become the basic areal unit for carrying out comprehensive developmental planning below the national level. It is a region defined by an intricate pattern of economic and social interdependencies; it is, therefore, a "community" informed of certain common interests; and above all, the locus of socio-economic power for a broader geographic area.

The basic requirement for the existence of a city region is transportation. Modern transportation facilities permit the outer "ring" to extend outward from the city core for about one hour's driving distance along major highways and connecting tributary roads.<sup>55</sup> Rapid transportation makes possible the ingathering of materials (e.g., lumber) from within this "ring" as well as the distribution of goods to outlying points of consumption. And it enables individuals to commute freely to most places of employment within the city region which, in turn, permits a more rational ordering of residential, industrial, commercial, and recreational areas. Accessible and rapid transportation is the means by which the various sections of the city region are welded together into a unified whole; modern transportation, in fact, has made the city region at all possible.

#### IV

In the past, regional planning in the United States has dealt primarily with the problem of resource development as a means for improving the economic welfare of people, while city planning has been mainly concerned with problems of land use control and circulation. Now we may argue that both of these functions--development and control--should be brought together in a common framework and that the logical framework for this purpose is the city region.

The focus of economic development is thus shifted from a broader territorial basis and an emphasis on natural resources to the city region and an emphasis on metropolitan resources, such as transportation, space, and community organization. Given this focus, planning for the city region should proceed along two parallel courses of action: (1) in the direction of developing metropolitan resources with a view to encouraging general economic prosperity; and (2) in the direction of controlling land use so as to create a pleasing, no less than an efficient, environment for living. Thus conceived, the planning function should extend across the entire area dominated by the central city.

The resources of most city regions in the United States are far from being fully developed. Yet the socio-economic reality of city regions will not be wholly attained until its resources have been brought to optimum productive levels.

Transportation is perhaps the most strategic of these sources where it unfolds the locational advantages of the city region. It allows for accessibility to the center and for rapid circulation among the various parts of the city region. Speaking in metaphor, we may say that transportation is the "nervous system" of a regional organism and is absolutely vital to its survival. It will influence both the structure and the efficient functioning of the city region as a center of economic development. Robert B. Mitchell, in the foreword to a study of accessibility in southeastern Pennsylvania, writes much in the same vein:

"Our 20th century technology makes possible a close and rapid contact among all parts of a great metropolitan area. Distance need be measured no longer by miles, but by minutes and convenience. This is the one most powerful fact in shaping the nature and arrangement of the various metropolitan localities. The potential of each locality is largely determined by its accessibility to other parts of the region. In turn the prosperity of the region as a whole will be very much affected by the quality of its internal circulation system."<sup>56</sup>

In improved internal transportation, Mitchell sees a way to "maximize opportunities for the good life and for prosperity in the Region."<sup>57</sup>

Second in importance only to transportation, are the space resources of the region. It is true that both transportation and space have traditionally been recognized as areas central to the concerns of city planners, but they have seldom been looked upon as resources which may be developed to assist in the economic growth of a "region."

Space is always in limited supply, modified as it is by its location, physical attributes, and the extent of man-made improvements on the land. It would be a radical mistake to believe that useful or "economic" space in the area surrounding a central city is co-extensive with the total number of square miles of this area, simply because this area does not as yet appear to be densely settled. The techniques of land use planning, sub-division control, and zoning are becoming quite as necessary in the less inhabited areas of a region as within the crowded urban core itself.<sup>58</sup>

A third important resource of the city region is found in the organization of its community life. As the city proper is itself often composed of different "neighborhoods," and as these join with one another in the polity of city life, so does the city region form a "community" which is composed of a number of inter-related parts: the urban core, industrial "satellites," "suburban" residential areas, village communities, and areas reserved for recreation and agricultural use. The economic integration of the city region will be expressed through the proper planning of its transportation and space resources, but it must be reflected in the social integration of the city region as well. Social integration sets limits to the possible economic integration of regional life. No part of the city region can fully develop its potentialities except within this larger regional framework. Functional differentiation compels the compels the component parts of the region to strive for closer mutual ties and always greater interaction. It is the development of the city region as a truly urban community which assures to each component part its special advantages and resources.



The basic spatial relations in an economy are found (1) between a central city and its surrounding region and (2) between one city region and another. The first type of relationship and its significance for planning has been described in the foregoing section. The second type of relationship has greater relevancy for national planning. Differences in the level of economic development among larger socio-economic "regions," such as those defined by the Census, are gradually disappearing in the United States.<sup>59</sup> A truly national economy is emerging, with individual "regions," in the old sense, gradually losing their claims to special federal attention. Regional criteria of "need" are no longer as determining to policy as criteria derived from purely national "needs".

Not only are the old regional differences in the United States disappearing, but most of the more densely settled parts of the country may eventually come within the influence of city regions. The landscape will be overlaid with a net-work of such regions, one region joined to the other. Donald Bogue came to a similar conclusion when he wrote:

"In the not too distant future.....the number of metropolitan centers may increase to such an extent that 65 miles will be the maximum distance which most areas lie from a central city, and technological improvements in transportation may permit all communities within this radius to participate directly with the metropolis."<sup>60</sup>

If this hypothesis is correct, and already it seems to hold true for large sections of the country, attention in national planning will have to shift increasingly to the relations among city regions. Transportation assumes a major role in defining these relations, and the current high pitch of interest in express highways is indicative of this trend.

In addition to planning for the city region and inter-regional relations, special resource problems may arise from time to time which call for a different areal organization than the one we have emphasized in this essay. In the case of power, water, or recreation resources, to cite some prominent examples, development may be organized on the basis of "functional" regions. Such a region may consist of an integral number of city regions grouped together for the purpose of planning a single function. In view of the interlinked pattern of city regions emerging in the more densely populated parts of the country, this particular form of regional organization is one likely to be followed. There are other possibilities, of course, where a functional region such as a watershed would cut across city regional boundaries or where several states would join in the solution of a mutual problem. But even here, the fact that city regions exist will loom large in planning considerations.

Although as much as 90 percent of the total population of the country may eventually reside within city regions, there will be large areas of sparsely settled land that fall outside the immediate influence of central cities. Such areas as the Cumberland Plateau, the Blue Ridge Mountains, the Ozarks, the Great Lakes cut-over regions, parts of northern New England, and large sections of the Southwest and West fall in this category. They pose special planning problems due to the poverty of their populations and their limited resources. An extensive type of development through recreation, forestry, or grazing will often form the basic approach to these areas.



They are regions characterized by special physical disadvantage for a more intensive development. They may be called "functional regions" when public policy addresses itself specifically to problems related to the development of their resources. However, the name is unimportant. What is important is the recognition that special problems beset these areas; that they fall outside the existing pattern of city regions and thus outside the main stream of economic progress; and that only a small proportion of the country's population will reside in them.

Apart from these special areas, the United States economy maintains a definite spatial structure expressed in the pattern formed by city regions, and functional planning will usually be carried out successfully where it is closely related to this pattern, point for point. City regions are the nerve centers of economic life in an area. They are the seats of economic power where most of the population is concentrated, where most of the vital decisions affecting larger areas are made, and where the financial means are present for carrying these decisions into action. Any planning which ignores this primary fact about the spatial structure of an economy must be judged unrealistic.

#### FOOTNOTES

<sup>1</sup>For an excellent and comprehensive summary, cf. R. G. Tugwell and E. C. Banfield, "Governmental Planning at Mid-Century," *The Journal of Politics*, XIII (1951), p. 133-163.

<sup>2</sup>Robert B. Mitchell and Chester Rapkin, *Urban Traffic: A Function of Land Use* (New York: Columbia University Press, 1954).

<sup>3</sup>In the present context, metropolitan planning will be treated as a form of city planning. This coincides with the view expressed by Benton MacKaye and Lewis Mumford in their article on "Regional Planning" which first appeared in the 14th edition of the *Encyclopedia Britannica* in 1929.

<sup>4</sup>National Resources Committee, *Regional Factors in National Planning* (Washington: U.S. Government Printing Office, 1935), p. 156.

<sup>5</sup>For example, Gordon Clapp, shortly before his resignation as Chairman of the Board of TVA wrote: "Those who urged the enactment of the TVA Act apparently believed that, if the Tennessee River were conquered and its water power harnessed, the river would help transform the economic life of the region and increase the productive capacity of the nation. Nothing less than the resources of the United States Government could cope with this task." TVA: *An Approach to Regional Development* (Chicago: The University of Chicago Press, 1955), p. 14.

<sup>6</sup>President's Water Resources Policy Commission, *A Water Policy for the American People*, Vol. I (Washington: U.S. Government Printing Office, 1950).

<sup>7</sup>Catherine Bauer, "Economic Progress and Living Conditions," *The Town Planning Review*, January 1954, p. 303.

<sup>8</sup>Survey Graphic, May 1925.

<sup>9</sup>Benton MacKaye, *The New Exploration: A Philosophy of Regional Planning* (New York: Harcourt, Brace and Co., 1928)..

<sup>10</sup>In the article on "Regionalism."

<sup>11</sup>Howard W. Odum and Harry Estill Moore, *American Regionalism* (New York: Henry Holt and Co., 1938), p. 253.

<sup>12</sup> Ibid., p. 254.

<sup>13</sup> Howard W. Odum, "The Case for Regional National Social Planning," *Social Forces*, October 1934, pp. 6-23; Rupert B. Vance, "Implications of the Concept 'Region and Regional Planning'," *Publication of the American Sociological Society*, August 1935, pp. 85-93; T. J. Wooster, Jr., "Southern Population and Social Planning," *Social Forces*, October 1935, pp. 16-22; Harry E. Moore, *What Is Regionalism* (Chapel Hill: The University of North Carolina Press, 1937); John V. Van Sickle, *Planning for the South* (Nashville, Tenn.: Vanderbilt University Press, 1943).

<sup>14</sup> Moore, op. cit., p. 13.

<sup>15</sup> Odum and Moore, op. cit., p. 272.

<sup>16</sup> Walter J. Matherly, "The Urban Development of the South," *The Southern Economic Journal*, February 1935, pp. 3-26. For more recent evidence, cf. Rupert B. Vance and Nicholas J. Demerath (eds.), *Urban South* (Chapel Hill, N.C.: Univ. Press, 1955).

<sup>17</sup> A dawning recognition that the rural way of life in the South might be in the process of being swallowed by progressive urbanization is found in Van Sickle, op. cit., pp. 76 ff. Van Sickle wrote his book at the crest of the wartime wave of expansion of industry in 1943.

<sup>18</sup> *Twelve Southerners, I'll Take My Stand* (New York: Harper and Brothers, 1930).

<sup>19</sup> Ibid., p. 3.

<sup>20</sup> "TVA: Federal Power," *Fortune*, May 1935, pp. 156-160.

<sup>21</sup> Van Sickle, op. cit., p. ix.

<sup>22</sup> That planning had struck its roots in the urban reformist movement during the early part of this century and that its methods and techniques were carried over into the national scene during the New Deal has been strikingly demonstrated by Rexford G. Tugwell in "The Sources of New Deal Reformism," *Ethics*, July 1954, pp. 249-276.

<sup>23</sup> National Resources Committee, op. cit., p. 167.

<sup>24</sup> Ibid., p. 159.

<sup>25</sup> Lewis Mumford, *The Culture of Cities* (New York: Harcourt, Brace and Co., 1938).

<sup>26</sup> Ibid., p. 315.

<sup>27</sup> Ibid.

<sup>28</sup> Louis Wirth, "The Metropolitan Region as a Planning Unit," *National Conference on Planning, Proceedings of the Conference Held at Indianapolis, Indiana, May 25-27, 1942* (Chicago: American Society of Planning Officials, 1942), pp. 141-151.

<sup>29</sup> Ibid., p. 150.

<sup>30</sup> Walter M. Kollmorgen, "Crucial Deficiencies of Regionalism," *American Economic Review, Papers and Proceedings*, May 1945, p. 377.

<sup>31</sup> Yale University, *The Case for Regional Planning, With Special Reference to New England* (New Haven: Yale University Press, 1947).

<sup>32</sup> Ibid., p. 36.

<sup>33</sup> Joint Committee on the Economic Report, (Washington: U.S. Government Printing Office, 1949).

<sup>34</sup> Op. cit., p. 1.

<sup>35</sup> Ibid.

<sup>36</sup> U. S. Council of Economic Advisers, *The New England Economy* (Washington, U. S. Government Printing Office, 1951).

<sup>37</sup> Louis Wirth, "The Limitations of Regionalism," *Regionalism in America*, edited by Merrill Jensen, (Madison, Wisconsin: The University of Wisconsin Press, 1951), pp. 381-393.

<sup>38</sup> Ibid., p. 383.

<sup>39</sup> Roderick D. McKenzie, *The Metropolitan Community* (New York: McGraw-Hill Book Co., Inc., 1935). Indeed, metropolitan regionalism in 1951 was not a new phenomenon; but it was now new in its more or less self-conscious opposition to the Southern regional school.

<sup>40</sup> Walter Christaller, *Die Zentralen Orte in Sueddeutschland* (Jena: Gustav Fischer Verlag, 1933.) See also the discussion of Christaller's theory in Robert E. Dickinson's *City Region and Regionalism* (London: Kegan Paul, Trench, Trubner and Co., 1947); for a more recent critical review, Rutledge Vining, "A Description of Certain Spatial Aspects of an Economic System," *Economic Development and Cultural Change*, January 1955, pp. 160-165.

<sup>41</sup> The most recent example is Vining, op. cit., pp. 164-5. Also August Loesch, *The Economics of Location* (New Haven: Yale University Press, 1954), p. 433.

<sup>42</sup> Don J. Bogue, *The Structure of the Metropolitan Community* (Ann Arbor, Michigan: Horace H. Rackham School of Graduate Studies, University of Michigan, 1950).

<sup>43</sup> Rutledge Vining, "Delimitation of Economic Areas: Statistical Conceptions of the Spatial Structure of an Economic System," *Journal of the American Statistical Association*, March 1953, pp. 44-64.

<sup>44</sup> Vining, "A Description of Certain Spatial Aspects....," op. cit., p. 185.

<sup>45</sup> Donald J. Bogue, *Population Growth in Standard Metropolitan Areas, 1900-1950*, (Washington: Housing and Home Finance Agency, 1953), p. vii.

<sup>46</sup> Ibid., p. 18.

<sup>47</sup> U. S. Census of Population, 1930, 1940, and 1950. To insure comparability of data, the old Census definitions of "urban" and "rural non-farm" were used for 1950.

<sup>48</sup> John R. P. Friedmann, *The Spatial Structure of Economic Development in the Tennessee Valley*, Research Paper No. 1, Program of Education and Research in Planning (The University of Chicago, March 1955), Chaps. II and III.

<sup>49</sup> Ibid., chap. V.

<sup>50</sup> Ibid., chap. VI.

<sup>51</sup> Ibid., pp. 31-36.

<sup>52</sup> The metropolitan center is itself related to other centers and, according to Vining, occupies a place in the hierarchy of cities within the national system as a whole. What we have attempted to describe in the preceding pages is only the growth of one of the sub-systems within the larger system for the nation.

<sup>53</sup> Eric E. Lampard, "The History of Cities in the Economically Advanced Areas," *Economic Development and Cultural Change*, January 1955, p. 102.

<sup>54</sup> The term "city region" is preferred to "metropolitan region" because the concept is meant to apply also to cities which are smaller than those defined by the Census as "metropolitan." According to the Census, the population minimum for the central city of a standard metropolitan area is 50,000. "City region," as here defined, may be areas with a central urban core of about 30,000 population. The parallel British term would be "town region."

<sup>55</sup> Friedmann, op. cit., p. 67. Cf. also Frank G. Coolson et al., *Paducah and Western Kentucky: Income, Labor, and Retail Trade Patterns* (Frankfort, Ky.: The Agricultural and Industrial Development Board of Kentucky, 1952); and Robert N. Gold, *Manufacturing Structure and Pattern of the South-Bend-Mishawaka Area* (Research Paper No. 36, Department of Geography, The University of Chicago, June 1954).

<sup>56</sup> The Southeastern Pennsylvania Regional Planning Commission, *Time-Distance* (Bridgeport, P., 1954).

<sup>57</sup> Ibid.

<sup>58</sup> The consequences of ignoring these problems are vividly stated by Karl Belsen in his "Misuse of Land in Fringe Areas and Inadequate Subdivision Standards," *Problems of Decentralization in Metropolitan Areas*, Department of City and Regional Planning, University of California, 1954. (Mimeographed).

<sup>59</sup> Charles A. R. Wardwell, *Regional Trends in the United States Economy* (Washington: U. S. Government Printing Office, 1951), especially Chap I.

<sup>60</sup> Bogue, *The Structure of the Metropolitan Community*, op. cit., p. 55.





## A CONCEPT OF RURAL-URBAN REGIONS

JOHN KINSEL

COMMUNITY PLANNING REVIEW, SEPTEMBER 1956, 1957

Reprinted by permission of the

COMMUNITY PLANNING ASSOCIATION OF CANADA,  
425 GLOUCESTER STREET, OTTAWA 4, CANADA.

We are becoming urbanized in a hurry. Of the two million new noses counted in Canada's 1956 Census, 92 per cent were in cities or towns of 1,000 population and up. Two-thirds of all Canadians now live in these urban communities.

By and large, this postwar move to the cities caught us unprepared. And now we're running to keep from slipping backward. Water supplies, sewage disposal systems, housing developments, recreation facilities, schools and many other services have had to be expanded enormously to accommodate new thousands each year. Many urban municipalities have solved one emergency only to find themselves faced with a new one. Costs have compounded faster than new resources could be uncovered, and capital borrowing has increased rapidly.

### Many Problems are Rural-Urban

It is not surprising, then, that we have tended to regard the need for planning as something peculiarly associated with urban expansion. The obvious differences between rural and urban problems, the separation between rural and urban local government jurisdictions, and the urgency of extending urban facilities have succeeded in splitting our vision. Preoccupied with our special problems, we have lost sight of the many common interests which are shared by the residents of an urban centre and by those who live in its rural area of influence.

What are some of today's problems where this community of interest is evident?

First of all, consider the physical expansion of urban centres. Urban dispersal may take one or more of several forms: gradual encroachment on the surrounding rural land, encirclement of non-urban territory, radial penetration along main highways, or "leapfrogging". Industrial decentralization, which is becoming steadily more prominent, contributes to the dispersal of population and creates special problems of its own. In a few cases, urban dispersal may be systematically planned as a green belt development.

There can be little argument that cities and towns must have room to expand. But in our approach to the planning problem we have tended to overlook the fact that "rurban" transition involves rural as well as urban adjustments. For example, one technique which is extensively applied in "rurban" areas is agricultural zoning. But agricultural zoning has been used almost exclusively as a tool for urban land use--a means of controlling undesired urban development. A parcel so zoned may or may not be an economic farm unit. The zoning may or may not be permanent enough to justify certain kinds of intensive agricultural development. As pointed out by Ernest A. Engelbert, Land-Use Planning for "Rurban" Areas, (Farm Policy Forum, Winter 1957), the role of agriculture in "rurban" land use deserves considerably more study than it has received thus far.

Countless problems encountered in urban expansion require joint rural-urban planning. The question of zoning outside urban limits is one such problem. The location of industries on rural land well outside the jurisdiction of the neighbouring town or city where workers live is another. "Leap-frogging" suburban communities create demands for access routes of high standard through non-urban territory--demands which rural jurisdictions are not prepared to meet. Nearly every aspect of the problem of "urban spread" affects rural as well as urban interests.

No urban centre can be self-contained. It must seek its water supply outside the city gates. Usually it must dispose of its waste products in the rural area. Certainly its people must be fed from farms, near or far. Many of its people earn their living as handlers or processors of farm products or as suppliers of farm production needs. Similarly, the farmer is directly dependent on the urban centre to market his produce, to provide and service his equipment and to supply his many needs as producer and consumer. In this sense, urban and rural people are closely interdependent.

The need for joint rural-urban planning has not gone unrecognized. Nearly every expanding urban centre of any size has attempted to set up some kind of machinery in conjunction with the surrounding rural jurisdiction to deal with mutual planning problems. But such efforts have not been uniformly successful. In the first place, such arrangements are almost invariably and necessarily informal, with final action depending upon ratification by the separate jurisdictions. In the second place, the relationship is frequently one-sided, since very few units of rural local government have planning resources of their own. Finally, it frequently occurs that the urban centre must deal with not one but two or more rural jurisdictions to embrace the area necessary for planning purposes.

And, while the need for urban planning is receiving much attention, co-ordinated planning in our rural areas is no less urgent. City dwellers have no corner on problems. The same forces which are concentrating our people in urban areas are throwing life out of joint in farming communities.

#### Tendency Toward An Urban-Centred Life

For rural people (in the Canadian West at any rate) the past two decades have been years of continual social and economic adjustment. A rapidly advancing farm technology has meant substantial increases in the output per unit of farm labour. Farm size has increased rapidly. As a result, some farm families have higher incomes; many others are forced to leave farming and migrate to cities and towns. In many areas traditional rural neighbourhoods have disappeared entirely.

At the same time, farming is becoming less of a distinct way of life and assuming more of the attributes of other commercial enterprises. Greater commercialization means less self-sufficiency. The impact of higher incomes, mass communication, and the automobile has had a distinct urbanizing effect on farm values. The habits and attitudes of farm families are becoming less distinguishable from those of urban families. The social and economic focus of farm living is becoming centred on the nearby urban community.

Farm people are less content than they were to accept second class services: one room schools, impassable roads, inaccessible doctors and hospitals. At the same time, sparser population means higher per capita costs for nearly all rural services. A substantial number of farm families have sought individual solutions to these problems by taking up residence in urban centres near their farms. Where this has occurred, remaining farm residences are even more isolated. Even initially, the prairie farm settlement pattern was one of extreme dispersal. Depopulation has made that dispersal doubly extreme. The costs per farm of providing essential services such as roads and education have risen sharply because of this factor alone. Reinforcing this rise has been a steadily-growing demand for services of higher quality.

The need for intelligent rural planning is indeed urgent. Planning is needed to ease the transition of rural living to a new and larger urban-centred community. Planning is needed to improve and extend services to rural people --services comparable to those available in modern urban centres. Planning is needed on a coordinated rural-urban basis to contend with the growing list of mutual rural-urban problems.

#### Lack of Workable Planning Areas

If the province of Saskatchewan is typical, we are ill-prepared to meet these planning needs. The Royal Commission on Agriculture and Rural Life has recently completed a four-year study of a broad array of rural problems in that province. Its findings and recommendations, comprising over 3,000 pages in 14 volumes, cover subjects ranging from farm credit to the rural family. But throughout its investigation, the lack of facilities for rural planning, the lack of awareness of the need, and the lack of appropriate rural planning areas were matters of recurring concern. It devoted special attention to the problem of defining appropriate regions for rural planning and administration. And the regional concept which the Commission developed has important implications, not only for rural areas, but for urban centres as well.

The Commission's concern with defining rural-urban regions grew out of its appraisal of rural local government in Saskatchewan. It found a near-chaotic situation, characterized by:

(1) A basic local government unit in inadequate size. Although there is some variation, the typical rural municipal unit in Saskatchewan contains nine townships in an 18-mile square. This uniform small size creates some serious inefficiencies in planning and administering services. Small size means limited fiscal capacity, small population, and the absence of a meaningful planning area. In the provision of roads, for example, tax resources in most municipalities do not permit the purchase of modern efficient machinery; the small area precludes its economic use. Qualified supervisory personnel cannot be hired. Few local planning facilities exist and, in any case, road use is often oriented to points outside the municipality's jurisdiction.

(2) A multiplicity of units. In addition to almost 300 rural municipalities and some 500 incorporated urban centres, Saskatchewan has literally thousands of special purpose districts and quasi-governmental jurisdictions. These include school districts, consolidated school districts, larger school units, union hospital districts, health regions, municipal doctor plans, agricultural representative districts, and many, many more which fulfil some kind of local government function. Including them all, there is one such unit for every 130 people in the province.

(3) Overlapping jurisdictions. Most of the special purpose districts, which have been superimposed on the small rural municipal units, are larger and fail to conform to the municipal boundary lines. The resulting welter of overlapping boundaries makes integrated planning and administration practically impossible.

The historical explanation for this confusing situation is simple enough. Initially, rural municipalities were logically designed to provide very limited services in a horse and buggy age: dirt roads, minimum health and welfare services, and some agricultural services. School districts needed to be large enough only to supply population for a one-room school with a single teacher. What happened? Population began to thin out and at the same time people began to demand more and better services. Each new or expanded service failed to fit into the established rural municipal pattern. Rather than reorganize the basic structure to fit changing conditions, succeeding governments added new jurisdictions to meet each new situation. The resulting unwieldy structure resembles a building in which each floor has been constructed according to a different design and unique specifications.



### What is a Rational Planning Area

It was obvious to the Commission that the situation demanded rather drastic reorganization. As a first step the Commission was faced with the fundamental task of dividing the province into regions of appropriate size with appropriate boundaries. Certain criteria in establishing size were readily apparent: fiscal capacity, population, administrative efficiency, and so on. But where to draw the boundary lines? The settled portion of Saskatchewan is a reasonably homogeneous farming area with few natural boundaries and with few impediments to transportation, other than the condition of roads. What was the common denominator whereby the interrelated services of local government could be coordinated? What constituted a rational planning area for Saskatchewan's sparse and scattered rural population?

No single set of boundaries, of course, would be suitable to define all local government services and regional administrative functions. Some involve the administration and use of natural resources; here, boundaries and size are determined largely by the occurrence and use of the resource. Water users' districts would be one example; forestry administration another. Then there is a group of services which are oriented to consumers with dispersed consumption--such things as rural power, telephones and police protection. The location of boundaries and administrative centres for this kind of service are largely matters of technical necessity and administrative convenience.

In the third category are those services which are supplied more or less universally and which require consumption at a central point. These include some of the more important services typically assigned to local government agencies--such things as health, education and recreation. Roads become a vital adjunct to this group of services because of the mobility required for central consumption--bus routes for schools, access to doctors and hospitals and to municipal offices for the payment of taxes, and so on. These were the services which most concerned the Commission. They were services vital to the general welfare of people and they also exhibited the clearest need for coordination and integration.

### The Trading Area

The search for means to define an area of "natural association" which possessed a focal centre led the Commission to examine the urban centre and its trading area. The idea of a trading area is, of course, a familiar one. It has always been a preoccupation of retail merchants and is part of the stock-in-trade of market analysis. It defines a region, not in terms of geographic characteristics, cultural traits or typical economic activity, but rather in terms of economic interdependence. The trading area describes a pattern of association built on years of trial and error in the exchange of goods and services essential to our economic mode of life. If a farmer goes to Centre "X" to repair his equipment, buy his suits and play golf, why should he not go to the same centre to get hospital care, pay his taxes and educate his children?

The logic appeared inexorable. But to determine whether the trading area did in fact have the qualities necessary to define a meaningful region, the Commission conducted two field studies in widely separated areas of the province. In each of these field studies, farmers selected from a cross-section of location in the trading area of a medium-sized urban centre were interviewed. Detailed information was obtained on the economic and social relationship between the farm family and all the urban centres, large and small, which it visited. From these surveys, the Commission was able to construct the patterns of association for each area. Moreover it was able to gauge the effectiveness of the trading area as an organizing principle; to measure its economic and social meaning to the rural residents of the area. The result of these surveys offered strong confirmation to the validity of the Commission's concept.

## The Service Centre Principle

Although encouraged to proceed, the Commission soon faced a number of problems in attempting to apply the service centre principle:

(1) It was apparent that any given farm family was "attached" to several urban centres rather than one. Thus, the farmer markets his grain or buys his groceries in the hamlet closest to his farm. For other needs he travels farther to the village, the town or the city. The small centre performs certain functions within its small trading area. But the larger centre performs additional functions for residents of a wider area--including the residents of the smaller centres within its orbit. Out of well over a thousand centres of varying size in Saskatchewan, how was the Commission to determine which were the suitable centres and areas to define regions appropriate to the given public services?

(2) Regional boundaries must exhaust the area of the province. Did trading areas offer a reasonable basis for dividing the entire populated area?

(3) What about regional subdivisions? For some purposes sub-areas were necessary. Was there a basis in the organization of service centres for a rational subdivision of larger regional planning and administrative areas?

(4) The accepted method of defining an urban trading area--the market analysis technique--involved costly local surveys. Was there any alternative practical method for delineating trading areas?

The Commission pursued its analysis of these questions in a report on Service Centres. The study set out to do three things: (1) establish a basis for classifying service centres according to function; (2) examine the principles governing the location of service centres in an agricultural economy; and (3) test the applicability of the trade-centred community to the definition of regions through an actual analysis of service centres in a portion of the province.

Without attempting to deal here with some of the more complex and theoretical aspects of the Service Centres report, it is useful to examine some of the Commission's conclusions and their practical application.

First of all, the Commission demonstrated that it is relatively easy and inexpensive to classify urban centres in the order of the functions they perform for the rural population. For its purposes, the Commission adopted a classification of six levels of centres, ranging from the crossroads hamlet to the provincial city. As a measure, the Commission counted the number of services--both commercial and public--which farmers and their families used in each centre. Centres with 2-10 services were designated Hamlets; those with 11-25 were called Villages; and so on. Additional classifications were Towns, Greater Towns, Cities and Provincial Cities. The range of services available was the key to the classification system.

In the course of this classification, it became apparent that each rank of centre was marked by certain characteristic services. Services for which the demand was universal and the required scale of operation small were found in centres of all sizes. In Saskatchewan's farming area, for example, every centre has at least a grain elevator and a general store.



*First approximation of boundaries of Village-centred Service Areas in Southwestern Saskatchewan.*

These are the minimum services characteristic of a hamlet, although most hamlets also have one or more of the following: post office, railway depot, one-room school, church.

The next higher rank of centre--the village--typically offers all the services available in hamlets. In addition, it has a new range of services such as lumber yard, fuel dealer, municipal office and telephone exchange. These services require a larger market for economic operation than hamlet services. The trading area of the village, therefore, is correspondingly larger and includes not only the farm population but the population of the hamlets which surround it.

For each succeeding rank, the progression is similar. The number of centres in the higher rank is smaller and the trading areas are larger. And each rank has its characteristic range of services which are seldom found in centres of lower rank.

With respect to the location of centres, the Commission found evidence to indicate that centres are distributed with reasonable uniformity throughout any populated agricultural area.\* In Saskatchewan, the adherence of centres to rail lines disturbs the uniformity of distribution to a degree. The populated area, however, has a relatively dense network of rail lines; as a result, the "gaps" between trading areas are not of serious proportions. Generally speaking, the trading areas for any particular class of centre pretty well blanket the populated area.

\* The concept of centre location adopted by the Commission depends largely on theories advanced by Walter Christaller in explaining the location of central places in southern Germany. (See *Die Zentralen Orte in Sudddeutschland*, Jena, Gustav Fischer Verlag, 1933). The development and application of Christaller's theories in the Saskatchewan environment is the subject of a monograph: P. Woroby, *Functional Relationships Between Service Centres and the Farm Population*, unpublished thesis, University of Manitoba, 1957.



*First approximation of boundaries of Town-centred Service Areas in Southwestern Saskatchewan.*



*First approximation of boundaries of Greater Town-centred Service Areas in Southwestern Saskatchewan.*

It was also found that, by utilizing the tributary areas of two ranks of service centres, sub-regions could be delineated, although some compromises in boundaries were necessary to keep subsidiary regions wholly within the major region. Because of certain characteristics in centre location, it proved best to select alternate ranks of centres to define major regions and their sub-



divisions. The trading area of a Greater Town, for example, is most satisfactorily subdivided by Village trading areas rather than those of the intermediate Town. The reason for this is that Towns tend to straddle the border separating the trading areas of Greater Towns, while Villages tend to mark the limits of Town influence, and so on.

This latter characteristic proved extremely useful in developing a method for preliminary mapping of trading areas without resorting to costly local surveys. Between two adjacent Towns, for example, one will usually find a Village; between two Cities, a Greater Town. The Commission found evidence to support the thesis that trading area boundaries between two centres of a given rank are marked by the occurrence of a single centre of the next lower rank. By locating all such boundary markers, the general outline of trading areas can be derived.

In general, the Commission found that the trading area concept fulfilled its initial hopes as a sound method of approach to defining meaningful regions. In a detailed analysis of centres in Southwest Saskatchewan, it was able to rough out the approximate boundaries of trading areas for various ranks of centres without recourse to actual field surveys (see maps).

At the same time, the Commission makes no claims that boundaries located in this fashion can be considered final in any respect. They are only first approximations. In the first place, boundary lines in the above figures were drawn without detailed knowledge of local factors which might cause residents in the boundary areas to gravitate to one centre or the other. In any event, any final boundaries for administrative or planning purposes would need to be altered so as not to pass through smaller centres and their local trading areas. In the second place, the Commission points out that other factors such as fiscal capacity, population, administrative loads, and problems of coordination must be considered in establishing boundaries. The trading area is proposed only as a rational starting point in defining regions.

#### Advantages of the Trading Area

So much for the method developed by the Commission. What are some of the advantages of the trading area as a planning unit?

(1) It defines an existing pattern of association of people for certain economic and social purposes. It therefore lends itself to efficient organization for some of the more important public services. It defines boundaries (albeit in general terms) and locates the logical administrative centre for greatest convenience to the population being served. It provides the only sound orientation for planning local roads and contains the proper area for planning a local road network.

(2) Because of the functional differences between ranks of service centres, trading areas provide the basis for integral tiers of major and minor planning areas. Different levels of services and different levels of administration can be accommodated in an integrated system. Health services provide a good example here. General hospital care can be provided economically to a relatively small population, and minimum facilities need to be distributed widely to give adequate service. More specialized hospital and diagnostic services, however, require a much larger population unit for economic operation. A two-tier arrangement composed of smaller trading areas contained within the larger area tributary to a City, provides the logical base for integrating two levels of service.

(3) Because the trading area is oriented to its urban centre, it delineates the most suitable area for integrated rural-urban planning. In attacking the problems of urban expansion, the trading area is the natural unit. It defines and includes satellite communities which attract suburban movement. It includes all the access routes to the major centre. It includes the rural population dependent on the centre for commercial services, public services and recreational and social activities. At the same time, it includes those nearby rural areas



which the urban population uses for recreational activities. While it certainly does not solve all rural-urban planning problems, a unit based on the trading area nonetheless provides a framework with a minimum of structural handicaps.

#### Other Considerations affecting Regional Planning

The Commission, of course, was primarily interested in defining regions appropriate to the requirements of rural local government. Its recommendations for the reorganization of local government in Saskatchewan embraced additional considerations, a number of which have implications for regional planning.

It was the Commission's conclusion that local government--in the sense of a single local authority with comprehensive responsibility--had practically ceased to exist in Saskatchewan. In its place was a series of separate and sometimes conflicting jurisdictions, each serving some segment of local needs. The rural municipal unit, once the mainstay of local government, was essentially left with two residual functions: construction and maintenance of roads and collection of taxes. Health services were administered by hospital districts and health regions. Schools were administered by larger school units and school districts. Agricultural services were administered in a variety of ways: a few through municipal councils, some through special districts and others through relatively informal local arrangements. Other functions, once locally administered, were now in provincial hands. Jurisdiction had become so segmented that to identify any given rural area with a single responsible unit of local government was impossible.

The implications of this situation were far-reaching, in the Commission's view. The inability of citizens to fix local responsibility was contributing to an obvious decline in political participation and to a growth of apathy in rural areas. The lack of any comprehensive budgetary control over local rural expenditures was making long-term plans in the allocation of resources virtually impossible. The accurate determination of local tax load and tax carrying capacity was also out of the question. This, plus the very number of taxing authorities, made debenture financing difficult and costly. In addition, the inefficiencies and added costs involved in providing related services through unrelated jurisdictions were obviously high.

#### Aims of the Royal Commission

The Commission's recommendations for a fundamental and sweeping reorganization of rural local government in Saskatchewan are directed towards the achievement of the following:

- (1) Coterminous planning and administrative areas of adequate size for a maximum number of local government functions. First priority is given to the functions of education and public works (roads).
- (2) Establishment of boundaries on the basis of trade-centred communities. This involves matching units of optimum size to trading areas of the appropriate rank of service centres.
- (3) Integration of the maximum number of functions under a single authority within the reorganized areas. The Commission favours the county form of administration, with standing committees assigned to individual local government functions: education, public works, agriculture, social welfare, area planning, etc.

While the Commission made no firm recommendation in the matter, it also called attention to the need for integrated rural-urban jurisdiction over a greater number of functions. Particularly is this true in the case of Saskatchewan's small and middle-sized urban municipalities. The trend in education is toward integration of rural and urban school systems. Health services on an area basis often include both rural and urban residents. Certainly the joint rural-urban planning problems cited earlier would be immensely simplified if jurisdictional gaps were somehow bridged.

The Commission recognized that a number of difficulties stand in the way of achieving unified rural-urban jurisdiction. Land assessment as a tax base is not fully comparable in rural and urban areas. In the matter of political representation, rural residents hold some fears of urban dominance. And, despite the growing community of interest, certain aspects of local government are exclusively urban, others exclusively rural. Above all there are age-old prejudices and traditions to be broken down.

Nevertheless, the Commission proposed that careful study be made of incorporating villages and towns into the county system in Saskatchewan. The obstacles to this final step in integration may be more apparent than real.

In any event, the core of the Commission's approach to reorganizing and unifying local government in Saskatchewan is its concept of the rural-urban region--a region based on the patterns of association which people have built up to satisfy their day-to-day economic and social needs. How generally this concept may be applied remains to be seen. It appears to be particularly suited to Saskatchewan's problem: the definition of meaningful regions in an area characterized by relatively uniform agricultural development and by a system of service centres which evolved primarily to serve the rural population.



# THE FORM AND STRUCTURE OF THE FUTURE URBAN COMPLEX

CATHERINE BAUER WURSTER

from CITIES AND SPACE - THE FUTURE USE OF URBAN LAND, 1963

ESSAYS FROM THE FOURTH ANNUAL RESOURCES FOR  
THE FUTURE FORUM  
THE JOHN HOPKINS PRESS, BALTIMORE  
EDITOR BY LOWDON WINGO JR.

Republished by permission of

RESOURCES FOR THE FUTURE INCORPORATED,  
1755 MASSACHUSETTS AVE., N.W.,  
WASHINGTON, D.C. 20036

and

THE JOHN HOPKINS PRESS,  
BALTIMORE, MARYLAND.

TRADITIONALLY, AN URBAN COMMUNITY WAS A CITY, and the nature of a city was obvious. In a limited space it brought together a wide variety of people; it made them accessible to one another, provided them with communication with the outside world, and stimulated them to engage in many kinds of specialized but interdependent activity. The city had a government whose essential functions were to resolve the people's differences in the common interest and to provide their necessary services. The city was a little world and its tight-knit, articulated form reflected its structural unity.

Modern metropolitan trends have destroyed the traditional concept of urban structure, and there is no new image to take its place. Blind forces push to various directions, while urban environments are being shaped by decisions which are neither based on any real understanding of cause-and-effect nor geared to consistent purposes. But the problems are steadily mounting, and all levels of government are called in to solve them. Public actions and expenditures of many kinds play an ever-increasing role in shaping the urban and regional environment. But the problems cannot be solved piecemeal by ad hoc decisions unrelated to any clear consensus about public purposes. Costly conflicts must be resolved, alternative directions identified, and the nature of the big choices, which tend to come in packages, thoroughly understood.

Efforts to develop effective concepts and criteria for modern urban organization, and to create new public images of the desirable metropolitan community, have come from various sources. Utopian ideas have had considerable influence, from the old Garden City movement which produced the British New Towns program to the reaction against all forms of decentralization reflected in the current zeal to "save the central cities" by local renewal programs, a kind of inverted or anti-Utopia. But the much less romantic push for effective metropolitan planning is finally focusing attention on the basic questions of urban form and structure in the United States, in various ways. The practical requirements of transportation planning have brought scientific methods of



systems analysis and computer techniques into the development of alternative models for metropolitan growth and change, most advanced in the Penn-Jersey project. The equally practical requirements of public communication have stimulated such schemes as the Year 2000 Plan for the National Capital Region which dramatizes the problems and possibilities of future growth by presenting clear-cut alternative patterns. Finally, in the academic retreats, there is a fresh if belated wave of interest in theoretical explorations of the metropolitan wilderness, exemplified in the pioneering contributions of Walter Isard, Jean Gottmann, Lloyd Rodwin, Kevin Lynch, Stuart Chapin, and Melvin Webber.

This essay falls into none of these categories. It espouses no specific goals, Utopian or otherwise, nor does it promote any particular program of public action. It tries to be reasonably objective and more or less systematic in suggesting a range of alternatives for the spatial organization of the future urban complex, with some of their possible implications. But neither the arguments nor the evidence pretend to be "scientific"; they are simply an array of ideas, opinions, facts, and hunches.

#### THE PRESENT APPROACH

Even accepting these limitations, it proved to be a difficult task to suggest viable choices for future urban organization, briefly yet with some degree of logic and comparative interpretation. The following approach is more than a brave experiment, but it does hang on a fairly clear-cut set of premises which should at least provide some basis for argument. Since my concern throughout is with urban form and urban structure, essentially as a pair of dimensions, my use of the terms should be defined. "Form" means the physical pattern of land use, population distribution, and service networks, while "structure" signifies the spatial organization of human activities and interrelationships.

Underlying assumptions: a pair of key variables. In a discussion of "practical" alternatives, it is necessary to begin with the trends and forces that seem to be shaping present patterns. Then one can try to diagnose the major issues and the potential for change: problems, conflicts, shifting goals and values, new tools, which together might alter the course of environment - shaping decisions in various ways, leading toward different types of form and structure. Alternatives can then be suggested, with some of their possible implications. In other words, the test of viability must rest on judgments about the dynamic drives behind the development process, however difficult they may be to assess.

The trends and issues in metropolitan patterns of land use and communication seem to relate primarily to a pair of variables which can be loosely considered co-ordinates, one a rough key to "form," the other to "structure." The first falls along a scale which ranges from extreme dispersion to extreme concentration in space of urban activities and artifacts. This is the obvious metropolitan dichotomy: the tendency of certain functions to spread out horizontally over huge areas, while other functions pile up together. I have assumed that the major force behind dispersion is the propensity to seek "private" space values, a push which has been amplified by automobility and the increase in long-distance communication. Concentration, on the other hand, indicates close-knit physical linkages at the expense of private space. This may reflect purposeful choice, for example in office skyscrapers, or simply the lack of any other choice, as is often the case for low-income and minority residence.

The other variable is more difficult to characterize in simple terms, because the issue is seldom clearly posed although it is fundamental for all metropolitan planning. Indeed, the continuing controversy between the "decentrists" and the Big City defenders comes down to this question: at what physical scale can (or should) a significant degree of integration take place among the various specialized activities and functions of a

regional complex? Specialization implies interdependence, with more or less coherent organization at one or more levels, for urban areas as well as for industrial production. The questions are: where, at what scale and for what purposes?

These are obviously very complex questions, since the realms for various types and degrees of interaction and interdependence extend all the way from the house and the neighborhood with their limited domestic functions, to the nation, the world, and the universe. Let us agree, however, that the city was traditionally an important and relatively balanced realm for a certain set of functions in that it provided a varied population with housing, employment, and other frequently used and essential services. Most of these functions are still performed within a metropolitan area, but individual cities tend to be more and more specialized, serving a limited range of populations and activities. So the questions are: Do the pieces fit together only at the metropolitan level no matter what its size, or are there limitations of scale for certain everyday urban functions? Is the implicit assumption of most metropolitan transportation plans substantiated - that the metropolis is essentially a single diversified market for housing, jobs, and leisure-time facilities? Or is relatively balanced and integrated development feasible or desirable within metropolitan subareas? This is the premise behind proposals for New Towns or relatively self-sufficient satellite communities, and for more housing in the central city suited to the tastes and resources of middle and upper-income people who work there.

This variable ranges from the metropolitan Super-City - a single system with highly differentiated and interdependent parts, through various transmutations to a group of smaller urban communities, each providing for most of the ordinary economic and social needs of an approximate cross-section of the urban population. This factor has obvious implications for governmental structure and social relations as well as for functional organization.

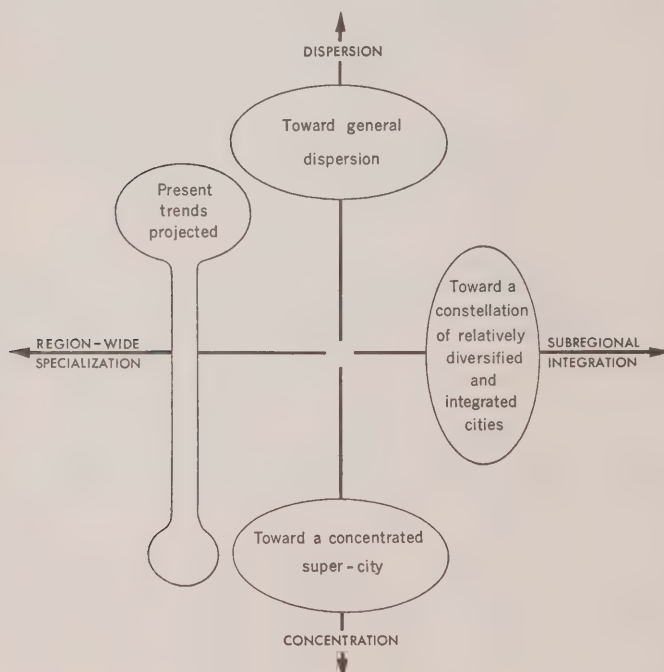
Selected alternatives and some qualifications. This pair of variables, viewed as co-ordinates, suggests a wide range of hypothetical choices for future form and structure. In practical terms, however, an assessment of current trends, countertrends, and the forces behind them leads to the selection of four possibilities. They would not all be equally possible everywhere, and certain limitations should be noted at the outside. The stage of growth is a constraint: the form and scale of past development in a large old community, and the strengths of vested interests, are likely to impede any radical change in spatial organization, as compared with a relatively new metropolis most of whose growth is yet to come. The choices open to New York will be different from these for Los Angeles, Denver, or Sacramento, owing to the differences in what is there already and in the probable rates of future expansion.

The dominant functions of the region will limit choice, as will its particular endowment of resources: wealth, knowledge, energy, and ability, existing natural or man-made attractions; the area and character of land available for new development and redevelopment; the capacity for effective action toward common ends, via market and political processes.

Finally whatever the local variables, the alternatives are more a matter of pursuing a fairly consistent course toward a certain set of goals than of achieving any particular kind of community in neat, pure form. The development of an entirely new urban agglomeration of major proportions is unlikely, though not impossible. Thus, conflicts between the old pattern and new directions have to be resolved gradually along the way, with considerable flexibility.

With these qualifications the accompanying diagram indicates roughly how several alternatives might relate to the two co-ordinates:

1. Present trends projected. Region-wide specialization with most functions dispersed but with a push toward greater concentration of certain functions in the central cities. Perhaps unstable, likely to shift toward one of the other alternatives.
2. General dispersion. Probably toward region-wide specialization of certain functions but a considerable degree of subregional integration might be induced.
3. Concentrated super-city. Probably with a strong tendency toward specialized sectors for different functions.
4. Constellation of relatively diversified and integrated cities. With cities of differing size and character a range from moderate dispersion to moderate concentration would be feasible.



Terms for comparison: ends and means. Differences in urban form and structure must be evaluated in terms of the set of human ends (or benefits) they will serve, the other ends foregone, and the differing means (or costs) required to achieve these benefits. Each of our alternatives is a package of goods favoring a particular set of values and life-styles and having a particular price tag attached. But it is a hypothetical package, and in the present primitive state of urban cost-benefit analysis it is impossible to know exactly what the goods are, or what we would have to pay for them.

The ends can be compared in relatively simple, concrete terms, such as housing choice, job accessibility, class and race patterns. But the deeper social and economic effects will be harder to assess: productive efficiency and individual opportunity; family welfare, privacy, security, and cosmopolitan stimulation; quality of communications, adaptability to further change, social relations, and responsible citizenship. In a period when social science is mainly telling us how little we really know about needs and tastes, perhaps the range of environmental choice afforded by a particular urban pattern may be a factor of major importance. And this may be especially true of the residential environment, which offers very limited choices to most households today.



But the desirability of a particular package also depends on the means required to achieve it. Appropriate cost comparisons include the private and public expenditures for major items such as housing, transportation, redevelopment, and open space; the forms and degrees of public power that must be exercised at various levels of government; and broad social costs such as enforced dislocation, destruction of existing values, and waste of resources. In an extremely rough and general way, some of these differentials may be fairly obvious, while others are impossible to evaluate.

These are complex questions in a pioneering field, and all I can provide are some tentative and undoubtedly biased judgments. If they provoke debate and more systematic analysis they will have fully served their purpose.

#### TRENDS, COUNTERTRENDS, AND THE POTENTIAL FOR CHANGE

Planning, in Perloff's and Wingo's words, must be related to "the things that matter: the major social movements." I have tried to identify some of "the things that matter" which have a direct influence on urban form and structure because they are the forces behind certain key trends and variables. Two dimensions have been selected: from extreme dispersion (low density and scatteration) to extreme concentration (high density contiguity, and strong centering); and from large-scale integration (a single metropolitan system with specialized parts) to small-scale subintegration (diversified communities within the region with relatively balanced facilities for most ordinary functions). In these terms, what are the significant current trends and the forces behind them? What are the resulting problems and conflicts which could change the present picture?

Centrifugal forces: the selective push for private space. The dominant trend toward low densities and scatteration in outlying development reflects the demand for private space for certain functions: large areas to permit greater freedom on the site for industrial production and building operations, for shops and schools, and above all for middle- and upper-class family life. Closely related to the latter is the desire for natural amenity at home in private gardens and attractive vistas (and also increasingly in vacation cabins which produce a much wider ring of scattered development). Land speculation enhances the trend but is not the prime cause. In addition to these outward pulls, there is also the push to escape from city conditions - obsolete housing or inadequate schools, racial and cultural diversity, conflict, discomfort, high taxes, and helplessness - into small, safe, homogeneous, self-run communities with middle-class standards and status.

These varied "private" purposes which are related to the qualities of a particular site or small neighborhood area have been brought within reach by the achievement of another kind of private value, automobility, which permits individual freedom of circulation in a piece of personal property. Because private autos perform badly in the traditional type of multipurpose urban center, automobility has also contributed to the dispersal of business, cultural, and service facilities. Technology is serving these ends in other ways too: new equipment makes both houses and factories more self-sufficient; large-scale building operations provide most of their own utilities for standardized one-price homes; and rising opportunities for long-distance communications - mail, phone, radio, TV, and travel - make the individual or firm less dependent on immediate physical contacts within the metropolitan area.

These choices are open today, however, only to limited groups and functions: relatively foot-loose industries and businesses; the services that follow resident populations; families able to acquire suburban homes despite high prices, restrictive zoning practices, race discrimination, and rising taxes.



Of course, there is a great deal of medium- and high-density development, old and new. But dispersal has been the dominant trend for several decades, reflecting the conscious choice of multitudes of consumers and entrepreneurs. It has produced unanticipated problems and generated some counterforces, but unless these actually weaken the basic drives for private space they will probably not have much effect. In these terms, is the push for dispersal likely to increase or decline in the future?

The desired life-style of most American families with children still seems to call for the private home with a yard. High marriage and birth rates, and upward mobility with rising incomes and education, will only increase this demand, as will any abatement in race discrimination, or policies to provide cheaper housing in outlying areas.

There are, however, some qualifying factors in the trend toward endless suburban sprawl. Rising land prices and the demand for a wider range of dwelling types to suit varied household types and tastes are producing a greater admixture of multifamily rental units in some localities. Large-scale operations tend to result in patches of contiguous development, sometimes at "city" scale and including rental housing, community facilities, and industry. Public awareness of the costs of scatteration is likewise mounting, due to high taxes for inadequate services on the one hand, and the rising demand to preserve public open space and natural amenity within metropolitan areas, on the other. But measures to insure more compact development, or open space reservation, are not yet generally effective.

The force of purely "escape" motivations can become either stronger or weaker, depending largely on the increase or decline of race and class prejudice for whatever reasons, and the degree to which older cities become more or less ghettoized, or suburbia more mixed.

Accessibility to work is also an ambivalent factor. The business and professional people who continue to work in central cities have been willing to pay a high price for their home environment, in transportation time, trouble, and expense. But as their journey to work increases, or requires both a private car and one or more public conveyances, other solutions may be sought. If the offices move out to accommodate them, this can mean more dispersal. But if they settle for higher density housing, whether in the city or near a mass transit stop, it would have the opposite effect. Similarly, the factories and services which depend on relatively low-paid labor cannot move very far away from the old central districts, so long as they supply of cheap housing is predominantly located there. But if the suburban housing market were broadened, these jobs might become more dispersed.

The number of second homes for leisure-time use will probably increase enormously. This will broaden the extent of scatteration throughout a vast region, but at the same time it might conceivably mean greater acceptance of compact development, with greater convenience to work and other urban facilities, for weekday use.

In any case, centrifugal forces and private values, however dominant in new development, are still countered by some opposing influences, actual or potential.

Centripetal forces: by choice and by compulsion. The revival of skyscraper office development in many downtown districts reflects the continued demand among certain types of business enterprise for face-to-face contacts and adjacent services within "walking precincts," or merely for the prestige value of a particular location. This is clearly a conscious choice, despite the increased ease of long-distance communication and the increased burden of commuting; and it is therefore a centralizing factor which is likely to endure in some form. However, routine or mechanical office operations are beginning to move out, along with industry and consumer services. Over-all

employment is unlikely to increase in most central cities, and business districts may tend to become specialized enclaves, whether they stay downtown or move outside.

In most cities, the old consumer uses of the center for shopping, amusement, and cultural pursuits have either remained static or declined, despite metropolitan growth. Where entertainment does thrive, it seems to owe its existence primarily to "visiting firemen," business travelers, vacationers, and convention-goers rather than the local suburbanites who, as a matter of fact, may be more likely to patronize a central theatre or restaurant when visiting in some other city.

In general the choice of central locations for business and leisure use still appears to be strongest in cities with traditionally strong centers, like New York and San Francisco, and weakest in cities which have always been more or less dispersed such as Detroit and Los Angeles.

The other major use of central cities is both more universal and much more involuntary: lower-income and minority house-holds are forced to concentrate there, by and large, because old districts provide the only major source of cheap or unrestricted housing - whether in obsolete structures or new subsidized projects, and regardless of locational trends in their particular job opportunities. If the rate of upward mobility increases, or if the flow of disadvantaged in-migrants finally begins to dry up, or if the suburban housing market is expanded, this part of the picture might change quite rapidly. The degree to which they would choose suburban living, if they could, is sometimes questioned. The crowded slum enclave offers a semblance of security to the recent arrival and the disadvantaged, as Leonard Duhl points out elsewhere in this volume, and as redevelopers have belatedly discovered. But all our urban history suggests that their aspirations are probably not very different from those of the millions who have moved upward and outward before them.

Some middle- and upper-income white people have stayed in the cities by choice, of course, but increasingly these have been single workers, adult households, Bohemians, and - if the attractions are great enough - wealthy families who put their children in private schools and have second homes in the country.

Those who voluntarily select a tight city environment for homes or business have something in common. They all value private space and the freedom of automobility far less than the attractions of convenience to work, the opportunity for specialized contacts and facilities within a small area, the stimulation of diversity, or the sense of being part of a cosmopolitan community in direct touch with world affairs. These are traditional urban values, and it is quite possible that more would choose them if they could be had without a heavy sacrifice in private living conditions. Yet, the half-worlds of City-and-Suburb rarely offer such a choice.

This is the background situation, but there is a rising push to "save" the central cities which is taking two positive forms: urban renewal programs with federal aid, and efforts to create or improve mass transit systems for commuting. These movements stem primarily from the increasingly desperate desire of economic and political interests in the central cities to protect property values and the tax base, with a variable intermingling of other forces, such as the need to provide better housing for slum-dwellers and the new wave of intellectual concern for urban historical and cultural values, which also tends to be anti-suburbia and anti-automobile.

Redevelopment brings new private and public structures of various types - office buildings and apartments, civic and cultural facilities - usually at increased densities and all subsidized to varying degrees. Expensive apartments predominate, but there are also middle-income ventures and low-rent public housing projects. In addition (often in opposition) conservationist programs are active here and there.

Central city traffic conditions have been worsened by the tremendous expenditures in freeway construction since the war, and it is now widely recognized that large-scale concentration is incompatible with universal dependence on private automobility. Despite the declining use of public transportation, the improvement or creation of metropolitan transit systems is a lively issue with several entirely new schemes either built approved or under discussion.

To the extent that these movements fulfill their present aims they will tend to maintain or promote concentration, at least for certain types of residence, work, and leisure-time activity. But these programs are very expensive, in terms of both financial subsidy and such disruptive social costs as forcible dislocation, and the degree to which they can actually offset the predominant trend toward dispersal depends on many imponderables. Will the restrictions of the housing market continue to force most low-income and minority households to live in the old cities, whether in successive blighted areas or in heavily subsidized public housing projects? Will the Negroes use their rising political power for greater integration throughout the metropolitan area or for separatist strength within the central cities? To what extent will middle-class white families and business enterprise favor convenience and city attractions if it means political domination by lower-income and minority voters? Will mass transit mainly facilitate more two-way commuting, instead of more jobs in the city?

The movement to save old cities has been narrowly focused on central problems thus far, with little concern for the pattern of outlying development or the desirable form and structure of the region as a whole. This may change. It is already recognized that transportation is a region-wide problem in its political as well as in its functional aspects. Regional population distribution is likely to become a mounting issue, in terms of housing choice, suburban race and class discrimination, the increasing disparity between residence and job opportunities, and, above all, the tendency of central cities to become ghettoized with all the related implications for tax-base problems and renewal hopes.

These issues are just beginning to be posed, however. Effective measures to deal with the shape and structure of regional development have not yet been devised, and no public image of the appropriate goals has developed. Housing, land use, transportation and renewal policies could be used not only to promote either dispersion or concentration, but also to encourage a wider range of residential choice in both outlying and central areas. This leads into the whole question of "balance" and the level of functional and political integration, which is the second dimension I wish to discuss.

Toward region-wide specialization: a single super-city? The widespread dispersal of certain functions, while others remain highly concentrated, generates a pattern which poses some basic structural issues. In a way it is still the classic form of the modern city, with business in the center, industry on the fringe, and the outward neighborhood succession from poor to rich, only greatly expanded in all its dimensions and administered by hundreds of independent local governments. At the moderate scale of a single municipality, the urban community had problems of slums and services, but the pattern itself posed no great difficulties. For the metropolitan complex, however, communications and integration are critical issues which raise questions about social, economic, and political structure.

Above the neighborhood level with its domestic functions, is the metropolis necessarily a single organic system with highly differentiated parts? Is it essentially one labor and job market, one housing market, one set of leisure-time and service facilities? Is it made up of so many specialized but interdependent activity orbits of varying scale that they can only be integrated at the metropolitan level? If this is true, then the basic problems are likely to be intercommunications and unified regional government.



Or can it be too big to operate sensibly or efficiently as a single system? Could the ordinary activities of the vast majority of people be better cared for within subregional sectors or smaller diversified communities? If so, then basic changes in housing and land use policy are required within a structure of stronger local governments co-operating through some kind of regional federation. There are influences in both directions, and the picture presented here is inevitably over-simplified, but the strongest current trends seem to lean toward specialized sectors and communities rather than subregional integration, with central cities and outlying areas serving quite different but highly interdependent functions. Consider the distribution of resident population, jobs, and leisure-time facilities with some of the resulting disparities.

The social divisions among residents of old cities and newer suburbs are increasingly sharp, by income level, by age group, and, above all, by race. These divisions are largely created by the housing pattern, and strengthened by the limitations of the current housing market, which by and large serves only upper and upper-middle income white families in areas of recent growth. If present trends continue, low-income and minority households will soon predominate in many central cities.

Meanwhile, the locational specialization of employment and business enterprise is following a different pattern, with most new industrial and service jobs outside the cities, and certain types of office and professional work still downtown. As for outdoor recreation, any major open spaces that may yet be saved are likely to be out beyond the fringe, near people who already have private land but far away from the families who live in crowded slums or high-rise projects and who frequently do not have automobiles. For urban leisure-time activities, the old multipurpose centers provide cheap attractions for the poor, and also, to varying degrees, Bohemia for the beatniks and intellectuals, and very expensive entertainment for the rich and the visiting firemen. Equivalent middle-class facilities are likely to be scattered around outside or in specialized suburban "centers" for shopping, culture, or amusement (Disneyland, for example).

This pattern poses obvious problems of extended cross-commuting, of limited housing choice, of accessibility to an adequate choice of leisure-time facilities, and of critical tax-base discrepancies. It is a serious threat to the future of current renewal efforts. These problems may be the inevitable price of the increasing specialization which produced great urban agglomerations in the first place, and their solution may require a strong metropolitan government to insure over-all productive efficiency, equity, and effectiveness of intercommunication. The inherent trends, however, confront us with a paradox: the sharpening class and race divisions along with the tax-base disparities lead to deepening political conflict between central cities and suburbia which makes metropolitan unification ever more difficult, if not impossible, unless it is imposed by direct state or federal intervention.

The potential for subregional integration. The American metropolis has in certain ways been moving toward a vast unitary "city"-type structure with highly specialized interdependent parts, and it cannot be claimed that there is any conscious countermovement to encourage a greater degree of functional balance and self-containment within subregional sectors. Proposals for "satellite communities" keep coming up in metropolitan plans, however, doubtless stimulated by the evidence from Britain and elsewhere that relatively independent new towns can be developed successfully, while renewal programs reflect efforts to create in central areas a better balanced population related to downtown employment opportunities. But the relation of the functional structure of metropolitan areas to the development pattern has received inadequate research attention; we have little practical understanding of how it works now or how its workings might be improved. Obviously it is an overlay of numerous interlocking activity patterns, large and small, including many that extend far beyond the region and many that are normally circumscribed within a neighborhood. But we do not



really know to what degree and for what specific purposes the entire region is necessarily a single system. In question particularly are certain functions which used to be integrated at the city-wide level, such as the special consumer demands which brought people to central districts, and above all the trip between home and work. It is frequently assumed that these activities, with their implied range of choices, can only be encompassed to any significant degree today at the metropolitan-wide scale. But there are trends and pressures which tend to favor some form of sub-regional integration.

Human activity systems range all the way from the bedroom bathroom trek to the astronaut's orbit around the moon. Within the metropolitan complex, a great many functions have catchment areas which are normally quite limited: schools, playgrounds, meeting-halls, churches, ordinary shops, services and amusements, even junior colleges, general hospitals, super shopping centers, and little theatres.

The pattern varies tremendously with personal means and tastes. Some people go to any lengths to visit a race track, a symphony concert, an exotic restaurant, or a wilderness park, which others would ignore if they were next door. In between, a growing number of people would enjoy such specialties if they were fairly accessible. By the same token, many of the special "goods" can and should be more numerous and more accessible - in theory at least - because it would take a smaller over-all population to provide the selective demand. Mumford's principle of the cultural "grid," based on the British Museum's decentralized library service, is important for some of the highly refined but mobile resources. And if a tight multipurpose center has the stimulating and universal advantages claimed for it by central city saviors, then a large metropolitan region should probably have several such centers to serve the potential demand.

The critical questions seem to stem from the relations between the spatial systems of residence and employment. We have been acquiring some information about commuting patterns, and there will be more from the 1960 Census, but intensive analysis is also needed: case histories for a sampling of different occupations in different areas, including employment changes, residential changes, and how both jobs and homes were found. From preliminary Census data on commuting patterns as well as from more intensive recent studies it appears that the number of employed people who somehow manage to live and work in the same subregional sector may be surprisingly high considering the limitations of choice in the housing market. Both home-moves and job-moves within a metropolitan area appear to be frequently influenced by a desire to reduce the journey-to-work, even at the cost of breaking family ties of living in a less desirable home on the one hand, or subordinating economic opportunity to home values on the other. People who make such choices do not see or use the whole region as a single urban community: many of its opportunities might as well be in another area entirely. The lack of convenient jobs may therefore promote residential mobility, neighborhood instability and long-distance commuting, while the restrictions on housing choice can tend to limit economic opportunity, particularly for low-income and minority households. Of course, accessibility is more important than mapped distances, and my rather conservative judgments must be balanced against Webber's revolutionary concepts of metropolitan communications potentials (outlined herein in his essay). But it seems fairly clear that technology has not yet overcome the friction of space for the metropolitan commuter.

Although the residential pattern is greatly influenced by public actions, these broad locational issues have not yet been seriously posed in American planning or policy. The suburban market for new housing is limited more than ever to upper-income white families, while federal aids for low-cost housing are confined to city renewal and rehousing programs. Most European countries, however, have long assumed that new housing development must accommodate a more or less cross-section population. In the United States strong pressures are building up against suburban racial barriers and for a wider range of housing choice for middle- and lower-income families of

all races and household types. The central cities may come to support these pressures, although their political motivations will be mixed. But both state and federal governments will be increasingly involved in the rising metropolitan issues of class and race, of city and suburbs, of tax inequities, transportation costs, and general inefficiency.

Present trends might shift, therefore, toward a somewhat wider balance of population in both outlying areas and the central city, posing the possibility of greater functional integration below the metropolitan level. Strong resistance from existing suburban communities will affect the resulting pattern, however. Will there be a scattering of additional types of one-class enclave, for middle-class Negroes, for the aged, for cheaper homes? Can the present suburban communities, many of which already have industries, be induced to become socially diversified? Will entirely new cities be developed on the remote fringe where a wide range of housing and job choices may be particularly desirable? Can a reasonably healthy social balance be maintained in the central cities?

#### ALTERNATIVE DIRECTIONS FOR FORM AND STRUCTURE: SOME ROUGH COMPARISONS

The wide range of hypothetical possibility seems to come down to four reasonably practicable alternatives. The dominance of one or the other in a particular situation would depend on the dominant public, private, and individual purposes behind the environment-shaping decisions, the acceptability of the means required to achieve certain purposes, and differing local conditions which might enhance or impede the feasibility of moving in certain directions.

Before considering these alternatives and their implications in more concrete terms, let us try to summarize the conceivable public attitudes that would lead in one direction or another - the various common images of the future metropolis that might be influential. At the same time, certain precedents and prototypes which relate to these different sets of attitudes will be suggested, including Utopian images and practical experience.

#### Common Images and Their Prototypes

1. "There's nothing serious that can't be solved by better transportation and central improvements."

Seen from this viewpoint, quite prevalent among business and political leaders, it seems that some of the experts are making too much fuss. There's nothing abnormal or seriously wrong about the present metropolitan pattern, they feel. A lot of people like suburban living, and it's fine if they can afford it. The others must naturally live in older districts, but they will gradually move outward into better dwellings as we tear down the worst to make way for new apartments and office buildings. If necessary we can build some public housing. Of course, the metropolitan area is essentially a single community, and there should really be some kind of over-all government and planning, but local vested interests may be too strong. However, the state and federal governments can help to equalize the tax burdens a bit, to save some open space, and above all to solve the transportation problem. As long as we can get around, whether by automobile or mass transit or both, we'll be all right.

Since this simply assumes the projection of present trends which are visible in most American metropolitan areas, no additional illustrations or prototypes are necessary.

2. "Let people have what they want: space and mobility."

This attitude, very unfashionable in intellectual and downtown business or government circles today, reflects such powerful popular forces, however

inarticulate, that it might win out. The rationale behind it might be put into words as follows:

It is stupid and reactionary to put huge public investments into central redevelopment and mass transit. People don't want to live or travel that way any more, and they won't unless they're forced to. Open up plenty of new land and build plenty of homes on it for all kinds and classes. Even if some of it were subsidized it would be a lot cheaper than current redevelopment and public housing projects. And it would offer the slum dwellers a real choice which many of them would be glad to accept, instead of merely forcing them out of their present homes into something no better. More and more jobs will follow the people, and perhaps commuting could get easier. When the old city is thinned out, it will be simpler and cheaper to fix it up for the few things that really need to be there, which people can then reach by car. Most of the old-time city attractions are better outside where they have more space.

These are the forces that shaped Los Angeles and stimulate its fantastic growth despite the smog and other problems. At the Utopian level, the same values are reflected in Frank Lloyd Wright's "Broadacre City," and in Buckminster Fuller's lifelong effort to develop a completely mobile and self-contained house, free of the utility network. In some ways Melvin Webber's theoretical emphasis on the spatial freedom resulting from communications technology leads to a similar viewpoint.

3. "The Metropolis is a single Great City: pull it together and urbanize it."

This is the fashionable sophisticated view among the new urbanists, including many critical writers, social scientists, modern architects, central renewal promoters, and certain economic interests. The number of conscious adherents is probably quite small, but the intellectuals have often turned out to be the vanguard of much larger movements, and the potential strength of this view should not be discounted. It has various facets which are oversimplified and perhaps exaggerated in this brief interpretation:

Great concentrated cosmopolitan cities, with their close contacts and stimulating diversity, have always been the source of civilization. The metropolitan community is still essentially a city, no matter how many people there are in it, but it is being disintegrated by the boring sprawl and stupid escapism of suburbia and the automobile. City and country are two entirely different things, while the suburban hybrid has the virtues of neither one nor the other and is rapidly destroying both. We should put a stop to all scattered fringe development, fill in suburbia with apartment houses, greatly densify and diversify the old center (although some would like to save its historic flavor), develop the best possible mass transit system, forbid private cars in cities wherever possible, and in general promote an exciting and civilized life. Week-ends, if we want a change we can go to real country or the wilderness. Nearby open spaces for everyday recreational use can also be saved, if we stop suburban scatteration in time.

Utopias related to this view range from the technocratic models of Le Corbusier and the Bauhaus leaders to the nostalgic humanism of Jane Jacobs. It is also reflected in official planning practices, inevitably somewhat modified, in many central city renewal programs (with no suburban jurisdiction however), and in metropolitan planning for Philadelphia, Copenhagen, and (mixed with the fourth alternative) Stockholm.

4. "The behemoth is too big to be a single city: guide growth, at least, into relatively self-contained communities."

This is an old reform movement which has had many followers and widespread international influence in various guises. Rather scorned by the current avant-garde, it is quite as much an urbanist, anti-sprawl philosophy as it is anti-Big-City, and still has considerable appeal to a large and varied group of people, roughly in the following terms:



Instead of scattering houses, factories, shops, offices and services all over the landscape, we should pull them together into compact cities, with adjacent open space saved for recreation, agriculture and general amenity. There would be disagreement as to ideal city size, but suitable housing for a cross-section population should be provided, with more emphasis on row houses and garden apartments. A variety of employment opportunities should be encouraged, as well as a bona fide urban center. The cities would be readily accessible to each other and to the central city; indeed, such a pattern would favor a mass transit system if it is needed. The central city would normally provide certain region-wide services, and its population should also become better balanced. Some kind of regional federation and effective regional planning would be necessary. But local government would in many ways be strengthened, and democratic citizenship made more meaningful. A balanced choice of city and nature, privacy and opportunity, would be available to everyone.

These principles were originally stimulated by the Garden City movement, which led directly to the postwar British program of New Towns and expanded old towns. But they also have much broader manifestations: the current reorganization of Greater London into moderate-sized districts with considerable powers of self-government; Israel with its carefully developed state-wide system of cities and towns; the great metropolitan circle of old and new cities in Holland with the center reserved for agriculture and recreation; Stockholm's arc of satellites within the city limits; and various planning efforts in the United States, including the Year 2000 scheme for the National Capital Region and some California proposals.

#### Four Alternatives

How would these variant directions tend to work out? Would they fulfill the claims made by their proponents? What local conditions would favor one or the other? Following are some brief personal judgments:

1. Present trends projected. The wider dispersal of certain special classes and functions into outlying areas, with greater concentration of others in central districts, would probably tend to magnify the present problems of accessibility, inadequate choice, social and political schisms, and rising costs, particularly for transportation and housing. This might therefore be an unstable pattern, likely to push eventually toward one of the other alternatives, and there would in any case be an increasing degree of intervention by state and federal governments. The ultimate direction taken in a particular locality would depend in part on present limitations and opportunities in the area, in part on locally determined goals and actions, and in part on federal and state inducements.

2. Toward general dispersion. The underlying popular forces which favor low-density scattered development, particularly the desire for private space and automobility, are still very strong. If they become increasingly dominant, more housing for lower-income and minority households will be made available in out-lying areas, with federal and state assistance in new forms. This will hasten the decentralization of industry and even the most specialized consumer services. Some office functions may try to remain downtown where they are now highly centralized, and it would be easier to provide acceptable housing for middle-income and upper-income families in the old centers as they are thinned out and become less dominated by lower-class population. But the expanse of the region would be so enormous in the larger metropolitan areas that even the region-wide functions might tend to be scattered around, in some cases in close but highly specialized groups.

There could be a tendency for homes and work opportunities to be somewhat closer than they would be if present trends were projected. But sub-regional integration in any clear-cut form is highly unlikely. Instead there would be a complex chain-like system of overlapping catchment areas for daily activities, extending outward indefinitely, as is already more or less visible



in southern California. Residential development would probably continue to take the form of socially specialized enclaves, and class and race conflicts would make the creation of large suburban cities even more difficult than it is today. Service costs would be high, due to scatteration. Because there would be no strong reason for new development to be close to existing development, public open spaces and agriculture could be preserved, but this would call for direct state action. Indeed, all the unified powers required to maintain service and communications networks, and equalize tax burdens, would probably have to be exercised by state and federal agencies, either directly or through the creation of a regional government by their initiative.

Some will argue, with Webber, that increasing accessibility plus aspatial communication overcomes distance, with the result that people living at exurban densities can participate effectively in numerous realms, including a strong local community, and enjoy urban values along with their private space and mobility. This is a real issue, worthy of the most intensive study, but I am yet to be convinced. In my perhaps conservative and rather anti-technocratic view, the argument holds up for most of the personally selective and specialized realms of communication and interaction, and of course for one-way mass communication by TV and such, but not for the kind of community which provides contacts and responsibilities that cut across special interests creating common ground and stimulating mutual adjustment and integration. And I suspect that specialization, without an effective framework for integration, may be the basic curse and threat of our times, whether at the local, national or international level. In our social, civic, and political life we have not learned how to apply the real lesson of the scientific and industrial revolution: the cross-communication and interdependence that make specialization effective in the common interest.

This pattern is hardly possible in regions with highly concentrated populations where metropolitan areas are already beginning to overlap, such as the central section of the Atlantic Coast. To accommodate future growth they will be forced to choose one of the other alternatives. To the extent that these values have universal force, however, the rate of westward migration is likely to be stimulated. On the other hand, the people who have moved to the West are already somewhat self-selected to favor a dispersed pattern of living.

3. Toward a concentrated super-city. This is probably the least likely alternative, except under very special conditions. But if we are at the start of a general swing toward a Manhattan life-style, with supporting policies at all levels of government, programs for high-density redevelopment in central cities will be greatly accelerated for all income groups and for a variety of functions. State and federal action would prevent further sprawl in outlying areas, and a powerful metropolitan government would fill in the scattered spaces between present suburbs (often with industrial development) and rezone them for multiple dwellings. The most advanced technology would be applied to mass transit and high-rise structures, perhaps with co-ordinated three-dimensional circulation in central districts. Private automobiles would be banned wherever possible, and pedestrian enclaves encouraged.

This pattern would tend, I think, toward a high degree of functional and social specialization in its various sectors. Structures and subareas would have to be carefully designed to fit particular activities, and social conflicts among heterogeneous populations could be aggravated if they were mixed up together in such close quarters.

One problem will be difficult to solve: the enormous demand for weekend homes in secluded locations, with attractive natural surroundings. Perhaps this could be managed by providing air or rail service to many distant centers where family station-wagons would be kept.

Costs would be very high for central reconstruction and transportation, and would be increased by the demand for second homes with automobiles for recreational purposes.

The New York region particularly might tend in this direction because it has limited space, a highly centralized power structure, and a population that is probably more or less self-selected to favor these values.

4. Toward a constellation of relatively diversified and integrated cities. If the desire for private space and natural amenity is modified by greater concern for accessibility, diversity, and other traditional urban values, a tendency toward subregional integration would take various forms. Housing for all classes, races, and age-groups would, in any case, be provided in new outlying development, at mixed densities, and related to varied employment opportunities in the same general area. Since these cities would be fairly self-contained, they could be located quite far out on cheap land. This would require strong public and private initiative combined in some new form of agency. It could also be done by stimulating more balanced development in suburban communities already started, but this would encounter considerable resistance and require very ingenious inducements not yet devised. A system of greenbelts or wedges could be preserved, but this would require state or federal initiative at the start, when it would be most needed, pending the formation of a regional federation of cities with the necessary powers.

The transportation system would be subject to the same conditions. It could either be predominantly by rail (if larger, denser cities are favored) or by automobile for relatively small, low-density communities. Mass transit would not be as necessary for commuting as it is now, and distant intercity communications could conceivably be handled by air.

The old central city might remain quite strong, for region-wide functions and highly specialized facilities, but it would have less employment and a relatively balanced population with mixed densities and dwelling types. There would be far less disruption and dislocation than in the Super-City alternative with a much greater chance to preserve the diversity and historic qualities which make for real "urbanity." Where dominant central cities do not now exist, there might be a tendency for the specialized regional functions to settle in various cities (Clarence Stein's model), strengthening their centers and differentiating their region-wide attractions. In general, the cities might vary greatly in size and character, and they could either become a fairly close-knit regional network with minimal space between or spread quite far out into a larger region, depending on variable purposes and conditions. For those who prefer the, there could be homogeneous, but only partly self-governing, enclaves. Except for the extremes of scatteration, concentration and specialization, this pattern would probably offer the greatest choice in life-styles.

Costs would be relatively low, compared with any of the other alternatives, due to less scatteration on the one hand, and less high-density construction on the other. If rail mass transit is provided in addition to automobile circulation, this would add to costs but strengthen centers. Property values in the old central cities would have to be written down to some degree, but on the other hand, land for new development and big parks could be quite cheap if it were acquired in time.

In one form or another, this alternative would be feasible in almost any metropolitan area. It calls for no greater exercise of public power than is now applied to redevelopment, but basic innovations in policy and purpose would be required.

These are very sketchy and personal judgments as to the nature of the alternatives, the forces behind them, and their comparative significance. I would only argue that this kind of approach is needed to make both the science and art of environmental planning effective. Within a framework which poses a range of hypotheses as to the future form and structure of the urban complex, our pioneering efforts toward systematic understanding of the development process should be applied to the analysis of ends and means, and the weighing of costs and benefits, in particular situations. The same framework can, I think, enhance the art of public communication, which is a major responsibility of both planner and researcher. With creative imagination based on scientific analysis, the big choices open to public decision can be clearly presented.

## AGENDA FOR REGIONAL GOVERNMENT\*

ERIC BEECROFT

DIRECTOR OF PLANNING AND DEVELOPMENT,  
CANADIAN FEDERATION OF MAYORS & MUNICIPALITIES, 1963

Reprinted by permission of

THE CANADIAN FEDERATION OF MAYORS AND MUNICIPALITIES,  
56 SPARKS STREET, OTTAWA 4, CANADA

and

CANADIAN PUBLIC ADMINISTRATION, VOL. V, No. 2, 1962

There is a missing link in our Canadian political structure. We are becoming fully aware of this missing link as we try to cope with economic development and community development--problems of a magnitude and complexity which were unknown at the time when our forms of local and provincial government were devised.

### Modern Agenda

What we lack is a means to arrive at sound and timely decisions in respect to such basic subjects as the following:

- (a) all of the means of transport of people and goods and the control of traffic (including highways, streets, bus, rail and other transport services);
- (b) water conservation and water distribution;

\* The substance of this paper was presented in a meeting on "The Future of Local Government in Ontario" at the 1961 Annual Convention of the Ontario Municipal Association.

- (c) the disposal of sewage and industrial and other waste;
- (d) the promotion and location of industry;
- (e) the preparation of programs for housing and renewal;
- (f) the provision and appropriate distribution of such basic community services as schools and hospitals;
- (g) the provision of open space for recreation and leisure-time activity;



- (h) the adjustment of basic conflicts between "urban" and "non-urban" uses of land;
- (i) the regulation of land use as one of the essential means to assure a sound development of all the above-mentioned functions.

These now-familiar subjects were not on the agenda of either local or provincial governments in the 1840's or 50's. Nor are they happily accepted as the normal agenda of either local or provincial government even today. Yet--as a result of momentous technological changes affecting industry, agriculture and transport, and as a result of a frightening population growth in some areas, a sharp economic decline in other areas, and our increasing concern for employment and for a higher standard of individual and community living--such questions of economic and physical development are almost everywhere awaiting decision.

Looking at the new agenda, our frustrated local authorities see the need for a cooperative attack on such problems and they have devised many kinds of joint advisory planning bodies. They have also established a great number of inter-municipal specialized agencies--for example, transit authorities, water supply districts, sewage authorities, conservation districts--only to find that these separate agencies have an impact on one another, that effective area coordination is impossible to achieve without area thinking, area leadership and area decision-making.

The subjects on the new agenda are not just "planning" problems. They do of course require highly competent research and planning. But they are, in the last resort, problems for political decision, just as surely as are the national and international problems for which we maintain a national government responsible to the elected representatives of the people.

#### Urban - Rural Regions

It is still fashionable to believe that metropolitan government (along Toronto or Winnipeg lines) might fulfil this need for regional decision. The establishment of such government has been an unquestionable achievement; it has extended the horizons of municipal leaders; it has applied their energies and abilities to a broadscale attack on urban transportation, housing, education and many other problems. But it has helped also to show the inadequacy of the strict urban basis for a government which must cope with the modern agenda.

Indeed our trying experience with local government (metropolitan and otherwise) is shaking our confidence in the distinction between urban and rural. In daily practice we find that the most crucial unsolved problems of economic development and resources use and the regulation of land use lie beyond or between the present areas of urban concentration. Almost every municipal government, rural or urban, or rural-urban, now knows something about the high cost of "sprawl", of uncontrolled ribbon development, of the costly competition to attract industry and to avoid the costs of servicing low-cost housing and providing schools and other community facilities. Such high-priority subjects as water supply, water purification, soil conservation, the provision of recreation facilities and transport are all of common interest to farmer and city-dweller. They require common solutions, jointly studied, jointly debated and jointly arrived at. The productivity of our agriculture, forestry, fisheries and the productivity and habitability of our cities can no longer be separated as problems for research, planning and political decision.

In this age of increasing mobility, the distinction between urban and rural government not only must be abandoned as unworkable for prac-

tical economic and physical reasons, but can be abandoned. Communities can be built or rebuilt so that the distinction can be blurred; so that (without desecrating the rural landscape with billboards and ribbons of commercial development) the contrast between the dirt and ugliness of the city and the pure virgin countryside will be less apparent; and so that the pleasant open spaces may be accessible to the urban dweller, and the excitement, cultural opportunities and other temptations of the urban area may be accessible to the country dweller.

Does it not appear, therefore, that for reasons that reflect both our economic and our social aspirations, we must find a formula for creating political jurisdictions in which the public can look squarely at the subjects on our regional agenda and in which our elected leaders can be held responsible for making decisions thereon?

Which problems on the modern agenda could be described as strictly urban: suitable for discussion and decision by an urban as distinct from an urban-rural metropolitan or regional government? A list may give concreteness to our problem. Would any rural fringe municipalities be prepared to say that they could waive their interest in the problems of their urban neighbours in the following fields--or that they could pay for or execute satisfactory programs in these fields without coordination with their neighbours?

Roads?

Airport location?

Water conservation, purification and distribution?

Sewage disposal and the control of river pollution from industry as well as from municipal uses?

The promotion and location of industry?

The provision of open space and recreation facilities?

Schools, hospitals and health services?

The subjects on the agenda before us are urban-rural subjects, and, however great the difficulties, we must devise decision-making bodies to suit the agenda. For too long, we have been distorting the agenda to fit the existing fragmented machinery, or putting the agenda aside, or referring the items on it to committees of inquiry, ad hoc agencies or advisory planning bodies.

#### Economic Development, Area Rehabilitation and Community Renewal

In the past few years, a very strong impetus toward a regional approach to study and decision-making has come from our increasing concern about employment and productivity.

All over North America there is a mushrooming of regional economic planning bodies of one kind or another, sponsored by leaders of private enterprise and local government. This development is encouraged by such private business-supported groups as the Committee on Economic Development<sup>2</sup> and the American Committee to Improve our Neighborhoods (ACTION), which, by means of pamphlets and handbooks, have been urging business leaders to participate vigorously in metropolitan government and in the survey of regional development possibilities. These movements on the part of private enterprise in the United States reflect a marked interest in relating economic development planning with planning for community development, including improved housing and community facilities.

The political vacuum left at the regional level is being filled partially in many cases by a spontaneous growth of non-profit private associations in which local and provincial government leaders play only a cautious and auxiliary role.

The program of the Kennedy Administration's new Area Redevelopment Administration is based in part on a policy of loans and grants either to state agencies and local governments or to these newly-improvised regional development bodies, on condition that they are constituted in such a way that they are reasonably representative of the organized civic bodies in the area--business, labour, agriculture, etc.<sup>3</sup> A significant feature is that the legislation assumes that urban renewal, highway, street, water supply and waste disposal are all related parts of an area economic development program.<sup>4</sup>

In Canada also we have scores of areas in which there is chronic economic depression and where municipal, provincial, business and other civic leaders are groping--and groping more and more in cooperation together--for solutions.<sup>5</sup> The trend of the time in both countries, inevitably no doubt, is that appeals are being made to senior governments and that the senior governments, moved to take responsibility for increasing employment and productivity, will invite state, provincial and local governments to participate in the planning of comprehensive programs of economic development and, complementary thereto, municipal capital works.

We see underway a gradual blending of economic planning with the public capital works planning, the planning of community services and community facilities for which local government is mainly responsible.<sup>6</sup> The first steps are awkward and uncoordinated, but, in volume, they are considerable and far-reaching. In Canada recently, the Federal Government took a major step in linking employment incentives with basic urban development by offering financial assistance for sewers and sewer treatment. The federal Government's rapidly-expanding winter works incentive program may, as it is further refined, lead toward an all-year employment-creating program for sharing in long-term programs of local and regional works which have been arranged in order of priority in capital works budgets. The complete fulfilment of such a program would no doubt depend upon region-wide planning of physical development and financing.

#### The Threat to "Home Rule"

Municipalities seldom resist offers of federal financial assistance; but many misgivings are expressed regarding the ultimate consequences of the expanding federal programs on "home rule." Some municipalities feel that senior government agencies impose too many of their own ideas on them through the power of the purse, giving little encouragement to local creative effort in technical planning or design.

Most of us believe that over-centralization in either economic planning or in physical planning is bad for the nation and bad for our local communities. National programs will be all the stronger and more productive if a vigorous planning initiative is taken locally and if every region, on the basis of thorough analysis, asserts itself in defence of its own needs and demands.

This defence of local needs can be undertaken effectively only on a wide metropolitan or regional basis. The real enemy of effective local self-rule today is the fragmentation of our communities into governing entities which are unable, singly, to attack the major items of our increasingly urgent regional agenda.

The remedy is surely not to discourage the federal assistance which comes in to fill the vacuum. If a need is critical enough--whether for replacing outworn housing and commercial facilities, building new roads or mass transit, or controlling land use or giving jobs to the unemployed--senior governments will assert themselves for better or for worse. The remedy is to take better advantage of that assistance by formulating region-wide programs, by strengthening local government--not at the level of the existing splintered communities but at the level where the area's

resources and its facilities may be viewed as a whole--where citizen bodies and their elected representatives may arrive at informed and rational decisions.<sup>7</sup>

### "Home Rule" under Modern Technological Conditions

The agenda at the beginning of this paper suggests the area within which we might well restore and maintain a strong and genuine local home rule in the future. Essentially this means a geographical area in which elected officials and local citizens can deal with significant and basic questions of resource conservation and development and with the basic practical questions of economic development and community planning.

Is it not through strong area government that we shall have to study the impact of national provincial programs (for highways, water, airports, railways, urban renewal and housing)?

Is there any other instrument through which we can define the area programs and through which we can negotiate knowledgeably and effectively with senior governments in our own behalf?

### Would Regional Government Smother Local Democracy?

Are local democracy and community spirit thriving now? Are voters discussing the significant issues of community development? Are voters voting? There is much talk about apathy and confusion and indifference.

In defense of the voter, should we not consider whether, in his present fragmented jurisdiction, he finds it very hard to recognize and understand the significant issues on today's agenda? Through the area approach, could we release the vitality and interest of the electorate and their leaders in purposeful debate?

If the basic problems are those we have listed--they are largely associated with the area's economic base and with the related planning of land use and community facilities--is there any way to apply democratic decision to such problems except at a fairly wide area level?

Do we not have to adapt local government to modern technology and modern needs? Would we--or could we--reverse the process so that we could preserve town and township government as we have known it in the past hundred years? For example (looking back again to our agenda):

(1) Could we eliminate the motor vehicle which is probably the main technological cause of our need for area government? Our addiction to it and our dependence on it has made it the main factor in determining the form and quality of our communities; it causes congestion and it permits dispersal of both homes and industries; it has made road planning and building a vital and basic determinant in the development of our urban and rural economies. It has made area government necessary and has helped to make it possible.

(2) Could we slow up population growth? Could we, or would we, reduce population? To ask this question is to answer it. The world's population is increasing currently at the rate of about forty-six million a year (two and a half times the population of Canada). Our own development will be affected profoundly by the increasing pressure to use our resources effectively.

More than any other this population growth is the staggering fact which makes it inevitable that, whether we relish the idea or not, we and our children from now on will be engaged in economic planning and in the



planning of communities to accommodate multitudes which the last generation never anticipated. In India, thoughtful people are talking about how to plan for regional cities of 60,000,000. We are going to feel the impact of this population growth in terms of sharp pressures affecting our economy and our own population changes."

We in Canada have a greater difficulty than most people in adjusting ourselves mentally to what is in reality a revolutionary impact of technological and population changes. For water and land, which our ancestors thought were in unlimited supply, are now the precious elements which must be conserved and rationed if we are to maintain a productive economy and a decent standard of individual and community living.

To live in conditions of population density which our rural ancestors never dreamed of, we must try to plan for both compactness and dispersal. We must turn the wonders of modern technology to our use in the effort to use space and resources efficiently. We must think of the best patterns of urban development--whether "linear" or "fingers" or "stars" or "doughnuts"; and we shall be comparing notes with people everywhere about experiences with "new towns" and "satellite communities".

### A Political Responsibility

These new problems of local government cannot be solved merely by leaving them to planners and technical advisers. They are our problems to be dealt with by political decision. It is all very well to have this growing machinery of advisory regional planning boards and planning staffs. But should we not make sure that these are not in effect excuses for political indecision? We need not only more planners and teams of specialists but governments responsible to the electorate to supervise and work with the planners and teams of specialists--and to legislate!

### The Planning Process

In this connection we might note that the planning process is a process requiring not only people experienced in general planning but the regional community's entire team of technical specialists involved in economic, social, technical and financial operations. If you do not have it organized in this way, then you are not getting planning. It may seem paradoxical, but the more we progress with planning, the more we are likely to see that it is accomplished by ignoring the craft-proud distinctions between professions and the bureaucratic barriers between fields of operations. "The physical environment is indivisible" as noted by President Eisenhower's Commission on National Goals.

When we recognize that political decision, legislation, administrative action and informed citizen participation are the ultimate aims of planning, we will have the entire teamwork of planning conducted in immediate and frequent contact with our central political decision-makers. An incidental result of recognizing this political responsibility for planning and exercising it at the regional level will be that the teamwork of technical planning will be greatly strengthened and will find scope for a much more realistic attack on the problems of economic and community development.

Area government, in the context of the agenda which we are now discussing, could not only give a great and constructive release to the energies of civic leaders but could provide an incentive to the creation of a strong and effective civil service. Such a civil service is not easy to establish at the local level of government today.

### Linking Area and National Development

One of our greatest needs in Canadian government is for a link between the politics of area development and the politics of national development.

Our national leaders who are trying to put content into a vision of national development do appreciate, more and more, the need for thorough surveys of regional resources and manpower. They are working on such problems as rural rehabilitation, the revival of industry, agriculture and commerce in areas of labour surplus, the expansion of our production for export, and finding new uses of Canadian raw materials and new and better methods for processing them. They are working actively on measures of housing and urban development, transport, communications and energy development which could support all of the efforts already mentioned. The Provinces are likewise engaged.

It would be much easier, rather than harder, to accomplish these aims if every populated area of Canada had its own complementary means for examining its possibilities; if it could evolve its own programs; and if it could be in a position at all times to give authoritative expression to its programs and to its ideas of national policy. As we know well, our national economic and fiscal policies are not always beneficial in every region. Compromises are needed, but rational compromises and a rational overall Canadian policy will always be easier to attain if every area understands fully its position in the national economy and can negotiate authoritatively and effectively through its own official channels.

And so we return here to where we began--the great gap in our political structure at the area level and the agenda of public business which we are not now handling adequately through political means.

#### What is Left for Provinces to Do?

The reader may ask: "If regional governments are set up on the basis of every one of our little urban-rural economies, what functions, if any, are left for our provincial governments?"

The general answer is that it is up to our province--that is up to us as provincial citizens--to assert ourselves to examine and, if we see fit, to exercise the Province's responsibilities in regard to the future of local government.

First of all, the Province, along with the Federal Government, would be greatly aided in dealing with problems of resources use, trade promotion and community development if each regional community could speak with a clear informed voice.

Secondly, can we not imagine an immense simplification of provincial administrative problems--as well as a realistic solution to home rule--if our local government were based firmly on our regional urban-centred economies?

Altogether, the vertical collaboration between the three levels of government--which becomes a more and more essential feature of our operations--would be greatly facilitated by area organization, area capital works budgeting and area decisions at an authoritative political level.

There will no doubt be plenty for Provinces to do--and with less obstacles and frustrations--if they succeed in helping to develop strong self-propelled regional institutions.

It has been thought that a regional level of government would bring about an evil kind of centralization of municipal operations. But could it not be a means of decentralizing and democratizing federal and provincial operations--a role which our present local governments are not organized to perform? Regional governments could bring many major problems of national development more intelligibly within the purview of local citizens and their leaders, giving them a greater sense and opportunity of participation in vital national and provincial as well as local business.

The Province of Ontario is already doing much to encourage the development of regional programs and to assist municipalities in their own efforts to participate in regional development. Where resources conservation and development, recreation and parks are concerned, the Province has made remarkable progress in many areas, not only in planning but in putting far-reaching schemes into operation.

Because this Province has already pioneered in this field, because it has already initiated bold and imaginative measures to deal with our local problems, because it is a Province destined to be the scene of exceedingly rapid growth in industry and population, one ventures to suggest that it should be the Province to undertake a thorough inquiry to determine the bases upon which new forms of local or regional government, suited to the age of the automobile and air travel and exceedingly rapid population growth, could be established.

Such a provincial study, if manned by imaginative people and oriented toward the future without undue reverence for the very different circumstances of the past, would have a great value to all Canadians.

#### FOOTNOTES

<sup>1</sup> The Stake of Rural People in Metropolitan Government, Economic Research Service, United States Department of Agriculture, July 1961..

<sup>2</sup> The "Little" Economies: Problems of U.S. Area Development, Committee for Economic Development, New York, 1958.

<sup>3</sup> The States are encouraged to participate in this movement to establish planning coordinators at the State Government level. The area development programs are subject to review by a Governor-designated state agency for consistency with the State's overall development program. Loans and grants may be made either to these private regional bodies or to State or local governments for projects to support new industry--e.g., for the purchase or development of land and facilities (including, in cases of demonstrated need, machinery and equipment) for industrial and commercial use, and for the construction and improvement of plant structures.

Some idea of the scope of this regional development movement may be gained from reading the Act of Congress (Public Law 87-27, May 1, 1961) or the U.S. Department of Commerce Booklet on The Overall Economic Development Plan, August 1961.

The striking fact is that a new regional entity is introduced--a regional entity to receive federal aid and to implement certain employment-creating and community development programs--because the local government boundaries are too limited and the state governments, most of them rural-dominated, are slow to take the initiative. Both municipal and state governments in depressed areas, like their Canadian counterparts, are also lacking in taxable resources.

<sup>4</sup> This merging of economic planning and community planning is seen also in the proposals of the C.E.D.: for example, The "Little" Economies, already cited, and Distressed Areas in a Growing Economy, 1961.

<sup>5</sup> Somewhat parallel movements are evident in many Canadian areas, as for example in Manitoba where the official program of the government calls for area surveys of economic development possibilities and a coordination of community development (including improved housing and community facilities) with the development of increased productivity in industry. A similar development is emerging in Quebec in the administration of "Bill 65" (Law concerning aid to industry by municipal corporations) and in regional economic and technical planning studies; and in the Atlantic Provinces, the work of the Atlantic

Provinces Economic Council, the Atlantic Provinces Research Board and the local authorities--all gravely concerned about the persistent high level of unemployment--is leading toward a similar convergence of economic development planning and the planning of community development and renewal.

<sup>6</sup> Submission to the Government of Canada by the Canadian Federation of Mayors and Municipalities, November 10, 1961: especially sections on Employment and Urban Development and The Crisis of the Depressed Areas.

<sup>7</sup> "...The only way to maintain the power of government is to govern." This statement of Elihu Root (referring in 1909 to the fear of federal encroachment on state authority) is quoted by Luther Gulick in the Proceedings of the Local Government Workshop, 1960, Office for Local Government, New York State, Albany. Dr. Gulick urges municipalities to apply the same principle, by creating larger and stronger units capable of dealing with the major problems which require decision and action today.

The Committee on Economic Development in its report on Guiding Metropolitan Growth declares that "failure to establish metropolitan governments with wide powers will lead to a greater loss of self-determination in local affairs through the continuous transfer of responsibility to the state and federal governments."

<sup>8</sup> A remarkably fine set of papers from many countries is published in Regional Planning, Housing, Building and Planning Nos. 12 and 13, United Nations, 1960.





## BIBLIOGRAPHY

Suggested readings in Regional Development for laymen and professionals dedicated to the advancement of comprehensive and dynamic Regional Economic Development Programs.

An Economic Geography of Canada

Camu, P., Weeks, E.P., & Sametz, Z.W.,  
MacMillan Co. of Canada; 1964.

Some Aspects of Regional Planning

Community Planning Association of Canada,  
Toronto, 1961.

Report of Land Use to the Government of Ontario

Conservation Council of Ontario  
Toronto, 1960.

Economics and the Quality of Life

Galbraith, John Kenneth  
Science - July 10, 1964; Pgs. 117-123.

Economics, Aesthetics & Ethics in Modern Urbanization

Gottmann, Jean  
The Twentieth Century Fund; New York, 1962.

Regional and Resource Planning in Canada

Krueger, R.R., Sargent, F.O., de Vos A., Pearson, N.  
Holt, Rinehart & Winston of Canada, Toronto, 1963.

Rich Nations and the Poor Nations

Ward, Barbara  
W.W. Norton & Co. Inc., New York

Financial Assistance with Regional Development,

Wilson, T.,  
Atlantic Provinces Research Board, 1964.







DEPARTMENT OF ECONOMICS AND DEVELOPMENT